

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:CLASS 42:CLASS 43:CLASS 44:CLASS 50:CLASS 51:Atom 53:CLASS 54:CLASS

21:
Saturation : Unsaturated
Number of Carbon Atoms : less than 7

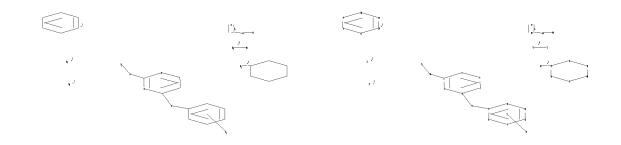
Generic attributes :

Number of Hetero Atoms : Exactly 1 Type of Ring System : Monocyclic 22: Saturation : Unsaturated Number of Carbon Atoms : less than 7 Number of Hetero Atoms : 2 or more Type of Ring System : Monocyclic : Saturated Saturation Number of Carbon Atoms : less than 7 Saturation : Saturated Number of Carbon Atoms : less than 7 Element Count : Node 21: Limited C,C5 N,N1 0,00 S,S0 Node 22: Limited C,C4 N,N2 0,00 S,S0 Node 32: Limited C,C2-4 Node 44: Limited

C,C1-3

=>

Uploading C:\Program Files\Stnexp\Queries\10568367 (RCE).str



chain nodes :
13 14 21 22 30 31 32 34 41 42 43 44 50
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 15 16 17 18 19 20 35 36 37 38 39
40
chain bonds :
4-13 6-14 9-13 14-30 31-32 34-37 41-42 41-43 43-44
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 15-16 15-20
16-17 17-18 18-19 19-20 35-36 35-40 36-37 37-38 38-39 39-40

```
exact/norm bonds :
4-13 6-14 9-13 14-30 31-32 41-42 41-43 43-44
exact bonds :
34-37 35-36 35-40 36-37 37-38 38-39 39-40
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 15-16 \quad 15-20
16-17 17-18 18-19 19-20
isolated ring systems :
containing 1 : 7 : 15 : 35 :
G1:[*1],[*2],[*3]
G2:[*4],[*5],[*6]
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:CLASS 42:CLASS 43:CLASS 44:CLASS
50:CLASS 51:Atom
Generic attributes :
21:
                         : Unsaturated
Saturation
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : Exactly 1
Type of Ring System : Monocyclic
22:
Saturation
                        : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Type of Ring System : Monocyclic
32:
Saturation
                        : Saturated
Number of Carbon Atoms : less than 7
44:
                        : Saturated
Number of Carbon Atoms : less than 7
Element Count :
Node 21: Limited
    C, C5
    N,N1
    0,00
    S,SO
Node 22: Limited
    C,C4
    N, N2
    0,00
    S,S0
Node 32: Limited
    C, C2-4
Node 44: Limited
```

C, C1-3

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

 $\Rightarrow$  s 11 sss sam

SAMPLE SEARCH INITIATED 14:53:35 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 1160 TO ITERATE

100.0% PROCESSED 1160 ITERATIONS 43 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 21157 TO 25243 PROJECTED ANSWERS: 467 TO 1253

43 SEA SSS SAM L1 L2

=> => ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

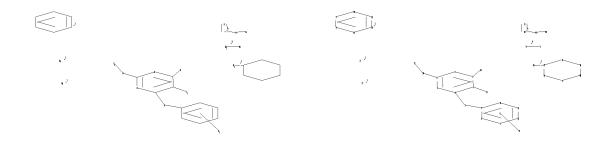
SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L4SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10568367 (RCE a).str



```
chain nodes :
13  14  21  22  30  31  32  34  41  42  43  44  50  53  54
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  15  16  17  18  19  20  35  36  37  38  39
40
chain bonds :
2-54  3-53  4-13  6-14  9-13  14-30  31-32  34-37  41-42  41-43  43-44
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12  15-16  15-20
16-17  17-18  18-19  19-20  35-36  35-40  36-37  37-38  38-39  39-40
exact/norm bonds :
```

```
3-53 4-13 6-14 9-13 14-30 31-32 41-42 41-43 43-44
exact bonds :
2-54 34-37 35-36 35-40 36-37 37-38 38-39 39-40
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 15-16 \quad 15-20
16-17 17-18 18-19 19-20
isolated ring systems :
containing 1 : 7 : 15 : 35 :
G1:[*1],[*2],[*3]
G2:[*4],[*5],[*6]
G3:H,Cl,Br,F,I
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:Atom 36:Atom 37:Atom 38:Atom 40:Atom 41:CLASS 42:CLASS 43:CLASS 44:CLASS
50:CLASS 51:Atom 53:CLASS 54:CLASS
Generic attributes :
21:
Saturation
                       : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : Exactly 1
Type of Ring System : Monocyclic
22:
Saturation
                        : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Type of Ring System : Monocyclic
32:
Saturation
                       : Saturated
Number of Carbon Atoms : less than 7
Saturation
                   : Saturated
Number of Carbon Atoms : less than 7
Element Count :
Node 21: Limited
    C,C5
    N,N1
    0,00
    S,SO
Node 22: Limited
    C,C4
    N, N2
    0,00
    S,SO
Node 32: Limited
    C, C2-4
```

Node 44: Limited

C, C1-3

L5 STRUCTURE UPLOADED

=> que L5 AND L3 NOT L4

L6 QUE L5 AND L3 NOT L4

=> d 16

L6 HAS NO ANSWERS

L3 SCR 1840

L4 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L5 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation. L6  $\,$  OUE  $\,$  L5 AND L3 NOT L4  $\,$ 

=> s 16 sss sam

SAMPLE SEARCH INITIATED 14:58:28 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1090 TO ITERATE

100.0% PROCESSED 1090 ITERATIONS 32 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*
PROJECTED ITERATIONS: 19820 TO 23780

PROJECTED ITERATIONS: 19820 TO 23780 PROJECTED ANSWERS: 301 TO 979

L7 32 SEA SSS SAM L5 AND L3 NOT L4

=> s 16 sss ful

FULL SEARCH INITIATED 14:58:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 22463 TO ITERATE

100.0% PROCESSED 22463 ITERATIONS 549 ANSWERS

SEARCH TIME: 00.00.01

L8 549 SEA SSS FUL L5 AND L3 NOT L4

=> => s 18

L9 57 L8

=> d 19 1-57 bib,ab,hitstr

```
ANSWER 1 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2010:1040912 CAPLUS
ΑN
      153:330827
DN
      Mutant ROS kinase expression in human cancers and methods and reagents for
ΤI
      detection, diagnosis, and prognosis
ΙN
      Gu, Ting-Lei; Tucker, Meghan Ann; Haack, Herbert; Crosby, Katherine
      Eleanor; Rimkunas, Victoria McGuinness
      Cell Signaling Technology, Inc., USA
PA
      PCT Int. Appl., 126pp.
SO
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
                                       DATE
                                                     APPLICATION NO.
      PATENT NO.
                              KIND
                                                                                 DATE
                                       _____
                                                     _____
                              ____
                                                                               _____
                              A2
                                    ( 20100819 ) WO 2010-US24109
      WO 2010093928
                                                                                20100212
РΤ
          W: AE, AG, AL, AM, AC, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP,
          ES, FI, GB, GD, GE, GH, GM, GI, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TD, BE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE
                SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
               ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2009-207484P
                             Р
                                      20090212
      The invention identifies the presence of mutant ROS protein in human
AΒ
      cancer. Mutant ROS proteins are FIG-ROS fusion proteins comprising part
      of the FIG protein (a Golgi apparatus protein) fused to the kinase domain of
      the ROS kinase. In some embodiments, the mutant ROS is the overexpression
      of wild-type ROS in cancerous tissues (or tissues suspected of being
      cancerous) where, in normal tissue of that same tissue type, ROS is not
      expressed or is expressed at lower levels. The mutant ROS proteins of the
      invention are anticipated to drive the proliferation and survival of a
      subgroup of human cancers, particularly in cancers of the liver (including
      bile duct), pancreas, kidney, and testes. The invention therefore
      provides, in part, isolated polynucleotides and vectors encoding the
     disclosed mutant ROS polypeptides (e.g., a FIG-ROS(S) fusion polypeptide),
      probes for detecting it, isolated mutant polypeptides, recombinant
      polypeptides, and reagents for detecting the fusion and truncated
      polypeptides. The identification of the mutant ROS polypeptides enables
      new methods for determining the presence of these mutant ROS polypeptides in a
      biol. sample, methods for screening for compds. that inhibit the proteins,
      and methods for inhibiting the progression of a cancer characterized by
      the mutant polynucleotides or polypeptides, which are also provided by the
      invention.
      761439-42-3, NVP-TAE-684
ΙT
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (mutant ROS kinase expression in human cancers and methods and reagents
         for detection, diagnosis, and prognosis)
RN
      761439-42-3 CAPLUS
```

piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-

2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-

CN

# (CA INDEX NAME)

- L9 ANSWER 2 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2010:924635 CAPLUS
- DN 153:328116
- TI Crystal Structures of Anaplastic Lymphoma Kinase in Complex with ATP Competitive Inhibitors
- AU Bossi, Roberto T.; Saccardo, M. Beatrice; Ardini, Elena; Menichincheri, Maria; Rusconi, Luisa; Magnaghi, Paola; Orsini, Paolo; Avanzi, Nilla; Borgia, Andrea Lombardi; Nesi, Marcella; Bandiera, Tiziano; Fogliatto, Gianpaolo; Bertrand, Jay A.
- CS Nerviano Medical Sciences S.r.l., Nerviano (MI), 20014, Italy
- SO Biochemistry (2010), 49(32), 6813-6825 CODEN: BICHAW; ISSN: 0006-2960
- PB American Chemical Society
- DT Journal
- LA English
- Anaplastic lymphoma kinase (ALK) is a receptor tyrosine kinase involved in AΒ the development of several human cancers and, as a result, is a recognized target for the development of small-mol. inhibitors for the treatment of ALK-pos. malignancies. Here, the crystal structures of the unphosphorylated human ALK kinase domain in complex with the ATP competitive ligands PHA-E429 and NVP-TAE684 are presented. Anal. of these structures provides valuable information concerning the specific characteristics of the ALK active site as well as giving indications about how to obtain selective ALK inhibitors. In addition, the ALK-KD-PHA-E429 structure led to the identification of a potential regulatory mechanism involving a link made between a short helical segment immediately following the DFG motif and an N-terminal two-stranded  $\beta$ -sheet. Finally, mapping of the activating mutations associated with neuroblastoma onto the structures may explain the roles these residues have in the activation process.
- IT 761439-42-3D, NVP-TAE684, complexes with anaplastic lymphoma kinase

RL: PRP (Properties)

(crystal structure; crystal structures of anaplastic lymphoma kinase in complex with ATP competitive inhibitors)

- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

IT 761439-42-3, NVP-TAE684

RL: BSU (Biological study, unclassified); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(crystal structures of anaplastic lymphoma kinase in complex with ATP

competitive inhibitors)

RN 761439-42-3 CAPLUS

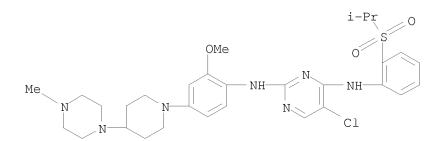
CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 3 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2010:725057 CAPLUS
- TI Study of the selectivity of insulin-like growth factor-1 receptor (IGF1R) inhibitors
- AU Chene, Patrick; Hau, Jean-Christophe; Blechschmidt, Anke; Fontana, Patricia; Bohn, Jacqueline; Zimmermann, Catherine; De Pover, Alain; Erdmann, Dirk
- CS Druggability-Enzymology-Profiling unit, Disease Area Oncology, Novartis Institutes of BioMedical Research, Basel, Switz.
- SO Open Enzyme Inhibition Journal (2010), 3, 27-37 CODEN: OEIJAD; ISSN: 1874-9402
  - URL: http://www.bentham.org/open/toeij/openaccess2.htm
- PB Bentham Science Publishers Ltd.
- DT Journal; (online computer file)
- LA English
- AΒ The insulin-like growth factor-1 receptor (IGF1R) is a drug target for oncol., and many studies are ongoing to identify compds. that inhibit its tyrosine kinase activity. IGF1R is highly homologous to the insulin receptor (IR) and IGF1R inhibition might be beneficial for patients, while IR inhibition may lead to limiting toxicity. Therefore selectivity for IGF1R over IR is the aim for drug design in this context. A few compds. that selectively inhibit IGF1R over IR in cells have been identified, but none of them show the same levels of selectivity in enzymic assays. To determine whether this discrepancy is linked to the conditions used in the enzymic assays, we have studied the interaction between known IGF1R inhibitors (NVP-AEW541, OSI906, AG538, NVP-TAE226) and phosphorylated/unphosphorylated IGF1R/IR proteins with both biophys. (isothermal calorimetry and surface plasmon resonance) and enzymic methods. In this report, we describe the results of this study and comment on the different degrees of selectivity IGF1R vs. IR measured in biochem. and cellular assays. Finally, our study provides new information on the biochem. and mechanism of action of these small mol. weight IGF1R inhibitors.
- IT INDEXING IN PROGRESS
- IT 761437-28-9, NVP-TAE226
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (NVP-AEW541 and OSI-906 than AG 538 and NVP-TAE226 showed more selectivity for human insulin-like growth factor-1 receptor over insulin receptor)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 4 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2010:709884 CAPLUS
- DN 153:276861
- TI Synthesis and structure-activity relationships of 1,2,3,4-tetrahydropyrido[2,3-b]pyrazines as potent and selective inhibitors of the anaplastic lymphoma kinase
- AU Milkiewicz, Karen L.; Weinberg, Linda R.; Albom, Mark S.; Angeles, Thelma S.; Cheng, Mangeng; Ghose, Arup K.; Roemmele, Renee C.; Theroff, Jay P.; Underiner, Ted L.; Zificsak, Craig A.; Dorsey, Bruce D.
- CS Cephalon, Inc., West Chester, PA, 19380-4245, USA
- SO Bioorganic & Medicinal Chemistry (2010), 18(12), 4351-4362 CODEN: BMECEP; ISSN: 0968-0896
- PB Elsevier B.V.
- DT Journal
- LA English
- AB Dysregulation of the anaplastic lymphoma kinase (ALK) is implicated in a variety of cancers. A series of tetrahydropyrido[2,3-b]pyrazines was constructed as ring-constrained analogs of a known aminopyridine kinase scaffold. Chemical was developed to rapidly elaborate the SAR, structural elements impacting ALK inhibitory activity were exploited, and kinase selective analogs were identified that inhibit ALK with IC50 values .apprx.10 nM (enzyme) and .apprx.150 nM (cell).
- IT 761439-42-3
  - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation and SAR of tetrahydropyrido pyrazines as anaplastic lymphoma kinase inhibitors)
- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2010:670328 CAPLUS

DN 153:134474

TI Usage of heparan sulfate, integrins, and FAK in HPV16 infection

AU Abban, Cynthia Y.; Meneses, Patricio I.

CS School of Graduate and Postdoctoral Studies, Rosalind Franklin University of Medicane and Science, North Chicago, IL, 60064, USA

SO Virologi (2010), 403(1), 1-16 CODEN: VIRLAX; ISSN: 0042-6822

PB Elsevier B.V.

DT Journal

LA English

AB Human papillomavirus type 16 (HPV16) is the major causative agent of cervical cancer. Studies regarding the early binding and signaling mols. that play a significant role in infection are still lacking. The current study analyzes the role of heparan sulfate, integrins, and the signaling mol. FAK in HPV16 infection of human adult keratinocytes cell line (HaCaTs). Our data demonstrate that infection requires the binding of viral particles to heparan sulfate followed by activation of focal adhesion kinase through an integrin. Infections were reduced in the presence of the FAK inhibitor, TAE226. TAE226 was observed to inhibit viral entry to the early endosome a known infectious route. These findings suggest that FAK can serve as a novel target for antiviral therapy.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(usage of heparan sulfate, integrins, and FAK in HPV16 infection)

RN 761437-28-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2010:641634 CAPLUS
- DN 153:27942
- TI Dual tyrosine kinase inhibitor for focal adhesion kinase and insulin-like growth factor-I receptor exhibits an anticancer effect in esophageal adenocarcinoma in vitro and in vivo
- AU Watanabe, Nobuyuki; Takaoka, Munenori; Sakurama, Kazufumi; Tomono, Yasuko; Hatakeyama, Shinji; Ohmori, Osamu; Motoki, Takayuki; Shirakawa, Yasuhiro; Yamatsuji, Tomoki; Haisa, Minoru; Matsuoka, Junji; Beer, David G.; Nagatsuka, Hitoshi; Tanaka, Noriaki; Naomoto, Yoshio
- CS Dep. Gastroenterol. Surg. Transplant Surg. Oncol., Grad. Sch. Med., Okayama University, Okayama, 708-8558, Japan
- SO Okayama Igakkai Zasshi (2010), 122(1), 17-25 CODEN: OIZAAV; ISSN: 0030-1558
- PB Okayama Igakkai
- DT Journal; General Review
- LA Japanese
- AB A review on roles of focal adhesion kinase (FAK) in Barrett's esophageal cancer, in vitro anticancer effect of TAE226, a dual inhibitor for FAK and IGF-1 receptor, apoptosis induction by TAE226 via AKT-BAD-caspase pathway, in vivo anticancer effect of TAE226, and possible cancer chemotherapy targeting FAK kinase.
- IT 761437-28-9
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (anticancer effect of dual tyrosine kinase inhibitor for focal adhesion kinase and IGF-I receptor in esophageal adenocarcinoma in vitro and in vivo)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholiny1)pheny1]amino]-4-pyrimidiny1]amino]-N-methyl- (CA INDEX NAME)

- L9 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2010:627117 CAPLUS
- DN 153:163337
- TI Thousands of chemical starting points for antimalarial lead identification
- AU Gamo, Francisco-Javier; Sanz, Laura M.; Vidal, Jaume; de Cozar, Cristina; Alvarez, Emilio; Lavandera, Jose-Luis; Vanderwall, Dana E.; Green, Darren V. S.; Kumar, Vinod; Hasan, Samiul; Brown, James R.; Peishoff, Catherine E.; Cardon, Lon R.; Garcia-Bustos, Jose F.
- CS Tres Cantos Medicines Development Campus, GlaxoSmithKline, Tres Cantos, 28760, Spain
- SO Nature (London, United Kingdom) (2010), 165(7296), 305-310 CODEN: NATUAS; ISSN: 0028-0836
- PB Nature Publishing Group
- DT Journal
- LA English
- Malaria is a devastating infection caused by protozoa of the genus AΒ Plasmodium. Drug resistance is widespread, no new chemical class of antimalarials has been introduced into clin. practice since 1996 and there is a recent rise of parasite strains with reduced sensitivity to the newest drugs. We screened nearly 2 million compds. in GlaxoSmithKline's chemical library for inhibitors of P. falciparum, of which 13,533 were confirmed to inhibit parasite growth by at least 80% at 2  $\mu$ M concentration More than 8,000 also showed potent activity against the multidrug resistant strain Dd2. Most (82%) compds. originate from internal company projects and are new to the malaria community. Analyses using historic assay data suggest several novel mechanisms of antimalarial action, such as inhibition of protein kinases and host-pathogen interaction related targets. Chemical structures and associated data are hereby made public to encourage addnl. drug lead identification efforts and further research into this disease.
- IT 761437-28-9 1042432-58-5
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (antimalarial drugs lead identification)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

- RN 1042432-58-5 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 8 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
         2010:212373 CAPLUS
ΑN
DN
         152:255168
         Predicting the response of tumor cells to a therapeutic agent by
ΤI
         measurement of biochemical network function and the selection of cancer
ΙN
         Schoeberl, Birgit; Harms, Brian; Gibbons, Francis David; Fitzgerald,
         Jonathan Basil; Onsum, Matthew David; Nielsen, Ulrik; Kubasek, William
         Merrimack Pharmaceuticals, Inc., USA
PA
SO
         PCT Int. Appl., 137 pp.
         CODEN: PIXXD2
DT
         Patent
         English
LA
FAN.CNT 1
                                            KIND
                                                          DATE
                                                                              APPLICATION NO.
         PATENT NO.
                                                                                                                          DATE
                                             ____
         WO 2010019952
                                               A2 (
                                                           20100218
                                                                               WO 2009-US54051
                                                                                                                           20090817
PΙ
         WO 2010019952
                2010019952 A3 20100624
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
                       CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, DC, DH, DC, DH, DC, CD, CE, CC, CM, CT, CM, CT
                       PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
                RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
                        IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
                        SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
                        ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                                        P
                                                       20080815
PRAI US 2008-189053P
                                              Ρ
         US 2008-194702P
                                                          20080930
         US 2009-208206P
                                             P
                                                          20090220
         US 2009-170367P
                                               Ρ
                                                          20090417
AΒ
         Methods for selection of therapies for the treatment of patients by
         predicting the response of cells, such as tumor cells, to treatment with
         therapeutic agents are described. These methods involve measuring levels
         of one or more components of a cellular network and then computing a
         Network Activation State (NAS) or a Network Inhibition State (NIS) for the
         cells using a computational model of the cellular network. The response
         of the cells to treatment is then predicted based on the NAS or NIS value
         that has been computed. The invention also comprises predictive methods
         for cellular responsiveness in which computation of a NAS or NIS value for
         the cells (e.g., tumor cells) is combined with use of a statistical
         classification algorithm. Biomarkers for predicting responsiveness to
         treatment with a therapeutic agent that targets a component within the
         ErbB signaling pathway are also provided. Xenografts of tumor cell lines
         show different responses to antibodies depending upon the level of the
         antigen (ErbB-3) present in the cells. Data from these cell lines were
         used to model the ErbB-3 pathway to predict responsiveness to these
         antibodies.
         761437-28-9
ΙT
         RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
               (predicting tumor response to; predicting response of tumor cells to
              therapeutic agent by measurement of biochem. network function and
              selection of cancer therapies)
RN
         761437-28-9 CAPLUS
```

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

- L9 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2010:192741 CAPLUS
- DN 152:469649
- TI Acquired Resistance of Non-Small Cell Lung Cancer Cells to MET Kinase Inhibition Is Mediated by a Switch to Epidermal Growth Factor Receptor Dependency
- AU McDermott, Ultan; Pusapati, Raju V.; Christensen, James G.; Gray, Nathanael S.; Settleman, Jeff
- CS Center for Molecular Therapeutics, Massachusetts General Hospital Cancer Center and Harvard Medical School, Charlestown, MA, 02129, USA
- SO Cancer Research (2010), 70(4), 1625-1634 CODEN: CNREA8; ISSN: 0008-5472
- PB American Association for Cancer Research
- DT Journal
- LA English
- Cancer cells harboring MET amplification display striking sensitivity to AΒ selective small mol. inhibitors of MET kinase, prompting their clin. evaluation. Similar to the experience with traditional therapeutics, most patients responding to treatment with such mol. targeted therapeutics ultimately relapse with drug-resistant disease. In this study we modeled acquired resistance to exptl. MET kinase inhibitor PF2341066 in MET-amplified non-small cell lung carcinoma (NSCLC) cell lines to identify drug resistance mechanisms that may arise in clinic. We found that activation of the epidermal growth factor receptor (EGFR) pathway emerges as a resistance mechanism in MET-amplified cells after prolonged exposure to PF2341066. Whereas combined inhibition of MET and EGFR kinases in MET-dependent NSCLC cells did not enhance their initial sensitivity to PF2341066, this combination dramatically suppressed the eventual emergence of drug-resistant clones after prolonged drug exposure. Conversely, activation of the EGFR pathway increased the yield of PF2341066-resistant clones, confirming the significance of this pathway in conferring resistance. Our findings support an intimate relationship between the EGFR and MET signaling pathways in NSCLC, and they suggest that combination treatment with MET and EGFR kinase inhibitors may be beneficial in MET-amplified NSCLC by reducing selection for drug resistant clones. Cancer Res; 70(4); 1625-34.
- IT 761439-42-3, NVP-TAE684
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (acquired resistance of non-small cell lung cancer cells to MET kinase inhibition is mediated by a switch to epidermal growth factor receptor dependency)
- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 10 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
    2009:1618749 CAPLUS
ΑN
    152:119659
DN
    Preparation of heteroaryl compounds protein kinase inhibitors
ΤI
ΙN
    Kluge, Arthur F.; Petter, Russell C.; Tester, Richland Wayne; Qiao, Lixin;
    Niu, Degiang; Westlin, William Frederick; Singh, Juswinder; Mazdiyasni,
    Hormoz
    Avila Therapeutics and Uses Thereof, USA
PA
    PCT Int. Appl., 560pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
                               DATE
    PATENT NO.
                        KIND
                                           APPLICATION NO.
                                                                  DATE
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    WO 2009158571
                         A1
                               20091230)
                                          WO 2009-US48784
                                                                 20090626
РΤ
        W: AE, AG, AL, AM, AD, AT, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
            CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP,
        SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
            ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
    US 20100029610
                        A1 20100204
                                           US 2009-492180
                                                                  20090626
                         Р
                               20080627
PRAI US 2008-76450P
    US 2009-148388P
                         Ρ
                               20090129
                         Ρ
    US 2009-170874P
                               20090420
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS
    MARPAT 152:119659
AΒ
    The title compds. I or II [ring A = (un) substituted Ph, 3-7 membered saturated
    or partially unsatd. carbocyclyl, 8-10 membered bicyclic saturated, partially
    unsatd. or aryl ring, etc.; ring B = (un) substituted Ph, 3-7 membered
    saturated or partially unsatd. carbocyclyl, 8-10 membered bicyclic saturated,
    partially unsatd. or aryl ring, etc.; R1 = warhead group; R2 = H, halo,
    CN, etc.; W1, W2 = a bond, alkylene wherein one methylene unit is
    optionally replaced by O, C(0), S, etc.; m, p = 0-4; R3, R4 = halo, CN,
    NO2, etc.], useful as inhibitors of protein kinases, were prepared E.g., a
    multi-step synthesis of III, starting from 2,4-dichloro-5-methylpyrimidine
    and 1,3-phenylenediamine, was given. Exemplified compds. I and II were
    tested in various biol. assays (data given for representative compds. I or
    II). This invention relates also to pharmaceutically acceptable compns.
    comprising compds. I, and methods of using the same.
    1202760-49-3P
                    1202760-53-9P
ΙT
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of heteroaryl compds. as protein kinase inhibitors useful in
        treatment and prevention of kinase-mediated diseases)
RN
    1202760-49-3 CAPLUS
    Benzamide, 3-[[5-fluoro-2-[[4-(2-methoxyethoxy)phenyl]amino]-4-
CN
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pyrimidinyl]amino]-N-methoxy-N-methyl- (CA INDEX NAME)

RN 1202760-53-9 CAPLUS

CN Benzamide, 3-[[2-[[3-[2-(dimethylamino)ethoxy]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-methoxy-N-methyl- (CA INDEX NAME)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 11 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2009:1467684 CAPLUS
ΑN
     152:12487
DN
     Preparation of phosphorus derivatives as kinase inhibitors
ΤI
IN
     Wang, Yihan; Huang, Wei-Sheng; Liu, Shuangying; Shakespeare, William C.;
     Thomas, R. Mathew; Qi, Jiwei; Li, Feng; Zhu, Xiaotian; Kohlmann, Anna;
     Dalgarno, David C.; Romero, Jan Antoinette C.; Zou, Dong
     Ariad Pharmaceuticals, Inc., USA
PA
     PCT Int. Appl., 246pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                             KIND
                                      DATE
                                                    APPLICATION NO.
                                                                               DATE
                                                    ______
                                                                               _____
                             ____
     WO 2009143389
                                     20091126
                                                  ) WO 2009-US44918
                                                                              20090521
РΤ
                              Α1
          W: AE, AG, AL, AM, AO, AT, ALL AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
               CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
               FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
          KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TD, BE, BI, CE, CG, CT, CM, GD, GN, GO, GW, MI, MD, NE, SN,
               SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
               ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2008-128317P
                             Р
                                   20080521
                              Ρ
     US 2008-137490P
                                     20080731
     US 2008-188796P
                              Ρ
                                     20080813
                              Ρ
     US 2008-192938P
                                     20080923
     US 2008-192964P
                              Ρ
                                     20080923
OS
     MARPAT 152:12487
     The invention features preparation of phosphorus compds. I (X1, X3, X4 =
AΒ
     organoamino, hydrocarbyl; ring A and E = aryl or 5- or 6-membered N, O, or
     sulfonyl containing heterocyclic ring; Ra, Rg = halo, cyano, alkyl, alkoxy,
     organoaminoxy, organoamino, hydrazino, organocarbonyl, organoamido,
     organosulfonyl, phosphoryl, etc.; L = 0, NH2; s = 1-5; p = 1-4) and their
     use as kinase inhibitors. Thus, reaction of
     4-aminodimethylphenylphosphine oxide with
     2,4-dichloro-5-(trifluoromethyl)pyrimidine in the presence of iPr2NEt in
     dimethylacetamide gave 4-chloro-N-[4-(dimethylphosphoryl)phenyl]-5-
      (trifluoromethyl)pyrimidin-2-amine which on amination with
     1-methylpiperazine gave title compound,
     N-[4-(dimethylphosphoryl)phenyl]-4-(4-methylpiperazin-1-yl)-5-
      (trifluoromethyl)pyrimidin-2-amine. The biol. activity of the compds.
     prepared is given.
ΙT
     761439-42-3
                        1197961-79-7
                                            1197962-83-6
     RL: PAC (Pharmacological activity); PRPH (Prophetic); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
         (preparation of heterocyclyl amino aryl phosphorus derivs. as kinase
         inhibitors)
     761439-42-3 CAPLUS
RN
CN
     2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-
     piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-
        (CA INDEX NAME)
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RN 1197961-79-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(2-methoxyphenyl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1197962-83-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-phenyl- (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:1447225 CAPLUS
- DN 152:136163
- TI Discovery of potential ZAP-70 kinase inhibitors: Pharmacophore design, database screening and docking studies
- AU Sanam, Ramadevi; Vadivelan, S.; Tajne, Sunita; Narasu, Lakshmi; Rambabu, G.; Jagarlapudi, Sarma A. R. P.
- CS Informatics Division, GVK Biosciences Pvt. Ltd., Hyderabad, Andhra Pradesh, 500037, India
- SO European Journal of Medicinal Chemistry (2009), 44(12), 4793-4800 CODEN: EJMCA5; ISSN: 0223-5234
- PB Elsevier Masson SAS
- DT Journal
- LA English
- AB The best ZAP-70 inhibitor model consists of four-pharmacophore features, (1) one hydrogen bond acceptor, (2) one hydrogen bond donor (3) one hydrophobic aliphatic and (4) one hydrophobic aromatic features. This model
- validated against 110 known ZAP-70 inhibitors with a correlation of 0.902 as well as enrichment factor of 1.61 against a maximum value of 2. This model picked 4094 hits from a database of 238,819 mols. while 358 mols. were indicated as highly active. Subsequently, docking studies were performed on the hits and novel series of potent leads were suggested based on the interactions energy between ZAP-70 and the putative inhibitors which validated not only the virtual screening potential of the model but also identified the possible new Chemotypes.
- IT 761437-30-3 761437-86-9 761438-93-1 761438-98-6 761438-99-7 761439-44-5 761439-57-0
  - RL: PAC (Pharmacological activity); BIOL (Biological study) (pharmacophore design, database screening and docking studies of potential ZAP-70 kinase inhibitors)
- RN 761437-30-3 CAPLUS
- CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

- RN 761437-86-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 761438-93-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761438-98-6 CAPLUS

CN 1-Propanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]-2-methyl- (CA INDEX NAME)

RN 761438-99-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-N-methyl- (CA INDEX NAME)

RN 761439-44-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(2-methoxy-4-nitrophenyl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-57-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(methylamino)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 13 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2009:1258865 CAPLUS
ΑN
      151:448447
DN
      Preparation of pyrimidine derivatives as protein kinase inhibitors for
ΤI
      treating proliferative disorders, immune disorders, and infections
IN
      Chen, Bei; Jiang, Tao; Marsilje, Thomas H.; Michellys, Pierre-Yves;
      Nguyen, Truc Ngoc; Pei, Wei; Wu, Baogen; Gao, Zhaobo; Ge, Yonghui; Huang,
      Chen; Li, Yuncheng
      IRM LLC, Bermuda; Novartis A.-G.
PA
      PCT Int. Appl., 149pp.
SO
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 2
                                        DATE
      PATENT NO.
                               KIND
                                                      APPLICATION NO.
                                                                                   DATE
                                                      _____
                                                     WO 2009-US39383
      WO 2009126515
                                        20091015
                                                                                    20090403
PΙ
                                A1 (
          2009126515
A1 20091015 WO 2009-US39383 20090403
W: AE, AG, AL, AM, AQ, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CO, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN,
                SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
                ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2008-43111P
                               Ρ
                                        20080407
                                Р
      US 2008-116023P
                                        20081119
      MARPAT 151:448447
OS
      The invention relates to pyrimidine derivs. having Formula I or II
AΒ
      (wherein R1 and R2 are H, C1-6 alkyl or halo-substituted C1-6 alkyl; R3 is
      halo, C1-6 alkyl, or a halo-substituted C1-6 alkyl; R4 is H;
      alternatively, R3 and R4 together form part of a ring; R5, R6 and R8 are
      independently C1-6 alkyl, C1-6 alkoxy, C2-6 alkenyl or C2-6 alkynyl, each
      optionally substituted; R7 is sulfamoyl, carbamoyl, etc.; R9 is
      -L-S(O)2R18, -L-S(O)2NRR17, etc.; R is H or C1-6alkyl; R17 and R18 are
      independently C1-6 alkyl, halo-substituted C1-6 alkyl, etc.; L is (CR2)1-4
      or a bond; n = 1-2) and methods for using such compds. as kinase
      inhibitors for disease treatment. For example, the compds. of the
      invention may be used to treat, ameliorate or prevent a condition which
      responds to inhibition of anaplastic lymphoma kinase (ALK) activity, c-ros
      oncogene (ROS), insulin-like growth factor (IGF-IR), and/or insulin
      receptor (InsR) kinase activity or a combination thereof. Synthetic
      procedures for preparing the pyrimidines of the invention are claimed as are
      compns. containing them. Example compound III, prepared in a multistep
      that culminated in the reaction of corresponding pipieridine intermediate
      with dimethylamino acetyl halide, had an IC50 of 0.026~\mu\mathrm{M} in an ALK
      assay.
      1190399-47-3P
                            1190399-50-8P
                                                   1190400-18-0P
      yl]amino]-5-methoxy-2-methylphenyl]piperidin-1-yl]-2-
      (dimethylamino)ethanone
                                     1190400-20-4P
                                                            1190400-21-5P
      , (R)-3-[4-[4-[5-Chloro-4-[2-(isopropylsulfonyl)phenyl]amino]pyrimidin-2-
```

yl]amino]-5-isopropoxy-2-methylphenyl]piperidin-1-yl]-1,1,1-trifluoropropan-2-ol 1190400-24-8P,

(S)-3-[4-[4-[[5-Chloro-4-[[2-(isopropylsulfonyl)phenyl]amino]pyrimidin-2-yl]amino]-5-isopropoxy-2-methylphenyl]piperidin-1-yl]-1,1,1-trifluoropropan-2-ol

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrimidine derivs. as protein kinase inhibitors for treating proliferative disorders, immune disorders, and infections)

RN 1190399-47-3 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]-1-piperidinyl]-2-(dimethylamino)- (CA INDEX NAME)

RN 1190399-50-8 CAPLUS

CN Methanone, [4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]-1-piperidinyl]-(2S)-2-pyrrolidinyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 1190400-18-0 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-5-methoxy-2-methylphenyl]-1-piperidinyl]-2-(dimethylamino)- (CA INDEX NAME)

RN 1190400-20-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-[1-[2-(methylsulfonyl)ethyl]-4piperidinyl]phenyl]- (CA INDEX NAME)

RN 1190400-21-5 CAPLUS

CN 1-Piperidineethanol, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]- $\alpha$ -(trifluoromethyl)-, ( $\alpha$ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1190400-24-8 CAPLUS

CN 1-Piperidineethanol, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethyl)

methylethoxy)phenyl]- $\alpha$ -(trifluoromethyl)-, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.

IT 1032903-64-2P, 4-[4-[[5-Chloro-4-[[2-[(propan-2-yl)sulfonyl]phenyl]amino]pyrimidin-2-yl]amino]-5-isopropoxy-2-methylphenyl]piperidine-1-carboxylic acid tert-butyl ester 1190399-48-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrimidine derivs. as protein kinase inhibitors for treating proliferative disorders, immune disorders, and infections)

RN 1032903-64-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1190399-48-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-(4-piperidinyl)phenyl]-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 14 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2009:1201246 CAPLUS
ΑN
     151:418110
DN
     Methods of chemotype evolution
ΤI
IN
     Hansen, Stig; Erlanson, Dan; Cancilla, Mark
PA
     Sunesis Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 106pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                            KIND
                                     DATE
                                                  APPLICATION NO.
                                                                             DATE
                                                                             20090325
     WO 2009120795
                                    20091001
                                                 WO 2009-US38276
PΙ
                             A1
          W: AE, AG, AL, AM, AO, AT, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
              CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
               FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
               KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
              ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
          PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
               SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
               ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                                  20080325
PRAI US 2008-39422P
                            Ρ
     US 2008-45265P
                             Ρ
                                    20080415
     US 2008-48545P
                             Ρ
                                    20080428
AΒ
     Herein is described a method to rapidly screen a large chemical space for a
     compound that binds to a target protein through an iterative fragment
     assembly approach that can be performed at low reagent cost and without
     requiring purification of the assembled product. The method employs a library
     of test ligands each of which comprise a 'bait' mol., which is known from
     prior art or prior screening to have some intrinsic affinity for the
     target protein, and a test moiety.
ΙT
     761439-42-3
     RL: PAC (Pharmacological activity); BIOL (Biological study)
         (methods of chemotype evolution)
RN
     761439-42-3 CAPLUS
CN
     2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-
     piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-
        (CA INDEX NAME)
```

- ANSWER 15 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN L9
- AN 2009:1130268 CAPLUS
- DN 151:381385
- Preparation of 5-fluoro-4N-phenyl-4-pyrimidinamine compounds and their use TΙ as inhibitors of IgE and/or IgG receptor signaling cascades
- Singh, Rajinder; Argade, Ankush; Payan, Donald; Molineaux, Susan; Holland, INSacha J.; Clough, Jeffrey; Keim, Holger; Bhamidipati, Somasekhar; Sylvain, Catherine; Li, Hui; Rossi, Alexander B.
- PΑ Rigel Pharmaceuticals, Inc., USA
- SO U.S., 259pp. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 4							
T 11114 •	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 7589200	B2	20090915	US 2004-911684	20040803		
	US 20050209230	A1	20050922				
	US 20040029902	A1	20040212	US 2003-355543	20030131		
	US 7557210	B2	20090707				
	ZA 2005000775	A	20080625	ZA 2005-775	20030729		
	US 20050038243	A1	20050217	US 2004-858343	20040601		
	US 7060827	В2	20060613				
	ZA 2004005979	А	20070425	ZA 2004-5979	20040727		
	US 20060025410	A1	20060202	US 2005-149105	20050608		
	US 7329672	В2	20080212				
	US 20060035916	A1	20060216	US 2005-148746	20050608		
	US 7329671	В2	20080212				
	US 20060058292	A1	20060316	US 2005-149418	20050608		
	US 7332484	В2	20080219				
	US 20060135543	A1	20060622	US 2005-299207	20051208		
	US 7435814	В2	20081014				
	US 20070225321	A1	20070927	US 2006-539013	20061005		
	US 20070293520	A1	20071220	US 2006-539018	20061005		
	US 7498435	B2	20090303	770 0000 500000	00061005		
	US 20070293521	A1	20071220	US 2006-539029	20061005		
	US 7642351	B2	20100105	HC 2006 F20041	20061005		
	US 20070293522	A1	20071220	US 2006-539041	20061005		
	US 20070293523	A1	20071220	US 2006-539049	20061005		
	US 20070293524 US 7485724	A1 B2	20071220	US 2006-539054	20061005		
	US 20080039622	B2 A1	20090203	US 2007-782581	20070724		
	US 7550460	B2	20080214 20090623	05 2007-782381	20070724		
	US 20090082567	ь2 А1	20090823	US 2008-199705	20080827		
	US 7655797	B2	20100202	03 2006-199703	20000027		
	US 20090171085	A1	20100202	US 2008-268235	20081110		
	US 20090171003	A1	20090702	US 2008-273357	20081118		
	AU 2008252053	A1	20090108	AU 2008-252053	20081203		
	US 2009232033	A1	20090702	US 2009-363537	20091203		
	US 20100197918	A1	20100805	US 2010-762178	20100416		
PRAT	US 2002-353267P	P	20020201	05 2010 702170	20100110		
T 1/11/1	US 2002-353333P	P	20020201				
	US 2002-399673P	P	20020201				
	US 2002-434277P	P	20021217				
	US 2003-355543	A1	20030131				
	AU 2003-208931	A3	20030131				
	US 2004-858343	A3	20040601				

US	2005-149418	A1	20050608
US	2006-539041	A1	20061005
US	2006-539049	A1	20061005
US	2006-539054	A.3	20061005

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 151:381385

AB The invention provides 2,4-pyrimidinediamine compds. of formula I that inhibit the IgE and/or IgG receptor signaling cascades that lead to the release of chemical mediators; intermediates and methods of synthesizing the compds. and methods of using the compds. in a variety of contexts, including in the treatment and prevention of diseases characterized by, caused by or associated with the release of chemical mediators via degranulation

and other processes effected by activation of the IgE and/or IgG receptor signaling cascades. Compds. of formula I wherein R4 is substituted phenyl; LG is a leaving group; and salts, hydrates, solvates, N-oxides and prodrugs thereof, are claimed. Example compound II was prepared by nucleophilic aromatic substitution reaction of 2,4-dichloropyrimidine with 4-ethoxyaniline. All the invention compds. were evaluated for their inhibitory activity fo IgE and/or IgG receptor signaling cascades (some data given).

IT 575484-59-2P 575484-65-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-phenyl(fluoro)pyrimidinamine compds. as IgE and/or IgG receptor signaling cascade inhibitors useful in the treatment of diseases)

RN 575484-59-2 CAPLUS

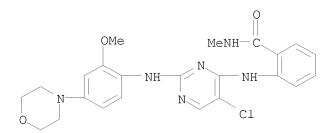
CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-methyl- (CA INDEX NAME)

RN 575484-65-0 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-(1-methylethyl)- (CA INDEX NAME)

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 361 THERE ARE 361 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:1120609 CAPLUS
- DN 152:281447
- TI 3D cell cultures of human head and neck squamous cell carcinoma cells are radiosensitized by the focal adhesion kinase inhibitor TAE226
- AU Hehlgans, Stephanie; Lange, Inga; Eke, Iris; Cordes, Nils
- CS OncoRay Center for Radiation Research in Oncology, Dresden University of Technology, Dresden, 01307, Germany
- SO Radiotherapy and Oncology (2009), 32(3), 371-378 CODEN: RAONDT; ISSN: 016 8140
- PB Elsevier Ireland Ltd.
- DT Journal
- LA English
- Background and purpose: Focal adhesion kinase (FAK), a main player in AΒ integrin signaling and survival, is frequently overexpressed in human cancers and therefore postulated as potential target in cancer therapy. The aim of this study was to evaluate the radiosensitizing potential of the FAK inhibitor TAE226 in three-dimensional (3D) tumor cell cultures. Materials and methods: Head and neck squamous cell carcinoma (HNSCC) cells (FaDu, UT-SCC15, UT-SCC45), lung cancer cells (A549), colorectal carcinoma cells (DLD-1, HCT-116) and pancreatic tumor cells (MiaPaCa2, Panc1) were treated with different concns. of TAE226 (0-1  $\mu$ m; 1 or 24 h) without or in combination with irradiation (0-6 Gy, X-ray, single dose). Subsequently, 3D clonogenic survival assays (laminin-rich extracellular matrix) and Western blotting (expression/phosphorylation, e.g. FAK, Akt, ERK1/2) were performed. Results: All investigated 3D cell cultures showed a dose-dependent reduction in clonogenic survival by TAE226. Intriguingly, TAE226 only significantly radiosensitized 3D HNSCC cell cultures accompanied by a pronounced dephosphorylation of FAK, Akt and ERK1/2. Conclusions: Our data demonstrate TAE226 as potent FAK inhibitor that enhances the cellular radiosensitivity particularly of HNSCC cells grown in a 3D cell culture model. Future in vitro and in vivo investigations will clarify, to which extent this approach might be clin. relevant for radiotherapy of HNSCC.
- IT 761437-28-9
  - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (3D cell cultures of human head and neck squamous cell carcinoma cells are radiosensitized by focal adhesion kinase inhibitor TAE226)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholiny1)pheny1]amino]-4-pyrimidiny1]amino]-N-methyl- (CA INDEX NAME)



RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 17 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2009:1018691 CAPLUS
ΑN
      151:280946
DN
      FISH assay for echinoderm microtubule-associated protein-like 4 (EML4) and
ΤI
      anaplastic lymphoma kinase (ALK) gene chromosomal inversion in lung cancer
IN
      Lee, Charles; Murphy, Carly; Janne, Pasi
PA
      The Brigham and Women's Hospital, Inc., USA; Dana-Farber Cancer Institute
      PCT Int. Appl., 64pp.
SO
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 1
                                      DATE
                             KIND
                                                    APPLICATION NO.
      PATENT NO.
                                                                                DATE
                                      _____
                              ____
                               A2
                                       20090820
                                                     WO 2009-US879
                                                                                 20090212
      WO 2009102446
PΙ
      WO 2009102446
                               А3
                                       20091126
           W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
               CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
          FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
PRAI US 2008-65422P
                              Р
                                       20080212
      Described herein are methods and compns. for performing a FISH assay for
AΒ
      the detection of a chromosomal inversion involving EML4 and ALK. Also
      included are methods for diagnosing and prognosing non-small cell lung
      cancer (NSCLC) based at least in part on a fluorescent in situ
      hybridization (FISH) assay to detect an EML4-ALK chromosomal inversion,
      and methods for treating diseases characterized by expression of an
      EML4-ALK inversion using compns. that inhibit ALK kinase activity. The
      invention relates, at least in part, to the discovery that a fluorescent
      in situ hybridization assay (FISH) can be used to detect a chromosomal
      inversion that results in an EML4-ALK inversion. The prevalence of this
      chromosomal inversion in non-small cell lung cancer (NSCLC) leads to
      diagnostic and prognostic applications for the FISH assay described
      herein. Use of the FISH assay for detection of an EML4-ALK inversion also
      has applications for determining appropriate treatment strategies for subjects
      who exhibit such a gene fusion. Further described herein are probes for
      use in a FISH assay for detecting an EML4-ALK inversion, methods for
      generating such probes, and kits containing such probes. The frequency of the
      EML4-ALK inversion in NSCLC cell lines and primary tumors from NSCLC
      patients of different ethnic backgrounds was characterized. EML4-ALK was
      detected in 3 NSCLC cell lines including one established (DFCI032) from a
      previously untreated female never smoker with lung adenocarcinoma. One of
      the three cell lines with the EML4-ALK translocation (H3122) was also
      found to be exquisitely sensitive and undergo significant apoptosis
      following treatment with an ALK kinase inhibitor (NVP-TAE684).
      761439-42-3, NVP-TAE684
ΙT
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (FISH assay for echinoderm microtubule-associated protein-like 4 (EML4)
```

RN 761439-42-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

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ANSWER 18 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2009:1015029 CAPLUS
ΑN
     151:280249
DN
     Treatment of acne vulgaris, rosacea and rhinophym with inhibitors of the
ΤI
     fibroblast growth factor receptor 2 and insulin-like growth factor 1
     receptor signal pathways
ΙN
     Melnik, Bodo
PA
     Germany
     PCT Int. Appl., 39pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                DATE
                                            APPLICATION NO.
     PATENT NO.
                        KIND
                                                                    DATE
                                 urares
                                            _____
                         ____
                                                                    _____
                                           WO 2009-EP51749
                                20090820
     WO 2009101199
                          A2
                                                                    20090216
РΤ
         2009101199 A3 20091126
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
     WO 2009101199
         SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                             20080215
PRAI EP 2008-101654
                    A
     EP 2008-154022
                          Α
                                20080403
                         P
     US 2008-123294P
                                20080407
     EP 2008-164431
                                20080916
                          Α
     EP 2008-168765
                          Α
                                20081110
AΒ
     A composition for the treatment of acne vulgaris, rosacea and/or rhinophym
     comprises at least one inhibitor of the FGFR2 signal pathway and/or IGFR1
     signal pathway. Also claimed is a bovine milk or a product of bovine milk
     having a reduced content of hormones, especially progesterone and growth
     factors, like IGF-1 and IGF-2, FGF1, and FGF2, or having a modified casein
     which has a reduced influence on IGF-1 levels. Further, use of Metforming
     for the prevention of adenocarcinomas, cardiovascular diseases and
     neurodegenerative diseases, is also presented.
     761437-28-9
ΤT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (as inhibitor of IGF1R tyrosine kinase, as inhibitor of IGF-1 receptor
        signal pathway; acne vulgaris, rosacea and rhinophym treatment with
        inhibitors of fibroblast growth factor receptor 2 and insulin-like
        receptor 1 signal pathways)
     761437-28-9 CAPLUS
RN
     Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-
CN
     pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)
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- L9 ANSWER 19 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:514975 CAPLUS
- DN 151:520
- TI A Class of 2,4-Bisanilinopyrimidine Aurora A Inhibitors with Unusually High Selectivity against Aurora B
- AU Aliagas-Martin, Ignacio; Burdick, Dan; Corson, Laura; Dotson, Jennafer; Drummond, Jason; Fields, Carter; Huang, Oscar W.; Hunsaker, Thomas; Kleinheinz, Tracy; Krueger, Elaine; Liang, Jun; Moffat, John; Phillips, Gail; Pulk, Rebecca; Rawson, Thomas E.; Ultsch, Mark; Walker, Leslie; Wiesmann, Christian; Zhang, Birong; Zhu, Bing-Yan; Cochran, Andrea G.
- CS Departments of Small Molecule Drug Discovery, Cell Regulation, Translational Oncology and Protein Engineering, Genentech Inc., South San Francisco, CA, 94080, USA
- SO Journal of Medicinal Chemistry (2009), 32(10), 3300-3307 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 151:520
- AB The two major Aurora kinases carry out critical functions at distinct mitotic stages. Selective inhibitors of these kinases, as well as pan-Aurora inhibitors, show antitumor efficacy and are now under clin. investigation. However, the ATP-binding sites of Aurora A and Aurora B are virtually identical, and the structural basis for selective inhibition has therefore not been clear. We report here a class of bisanilinopyrimidine Aurora A inhibitors with excellent selectivity for Aurora A over Aurora B, both in enzymic assays and in cellular phenotypic assays. Crystal structures of two of the inhibitors in complex with Aurora A implicate a single amino acid difference in Aurora B as responsible for poor inhibitory activity against this enzyme. Mutation of this residue in Aurora B (E161T) or Aurora A (T217E) is sufficient to swap the inhibition profile, suggesting that this difference might be exploited more generally to achieve high selectivity for Aurora A.
- IT 1158838-71-1 1158838-73-3 1158838-74-4
  RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  (bisanilinopyrimidine Aurora A inhibitors with high selectivity)
- RN 1158838-71-1 CAPLUS
- CN Benzamide, 4-[[5-fluoro-2-[(4-hydroxyphenyl)amino]-4-pyrimidinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

RN 1158838-73-3 CAPLUS

CN Benzamide, 4-[[5-fluoro-2-[(4-hydroxyphenyl)amino]-4-pyrimidinyl]amino]-N-propyl- (CA INDEX NAME)

RN 1158838-74-4 CAPLUS

CN Benzamide, 4-[[5-fluoro-2-[(4-hydroxyphenyl)amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 20 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2009:448699 CAPLUS
ΑN
     150:423212
DN
     Preparation of 2,4-pyrimidinediamines as IgE and/or IgG receptor
ΤI
     modulators for treatment of autoimmune diseases
ΙN
     Singh, Rajinder; Argade, Ankush; Payan, Donald G.; Clough, Jeffrey; Keim,
     Holger; Bhamidipati, Somasekhar; Sylvain, Catherine; Li, Hui
     Rigel Pharmaceuticals, Inc., USA
PA
     U.S., 300pp.
SO
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 4
                         KIND DATE
                                                 APPLICATION NO.
     PATENT NO.
                                                                              DATE
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                                                                             ______
     US 7517886
                                                US 2003-631029
                            B2
                                    20090414
                                                                              20030729
PΙ
     US 20070060603
                            A1
                                    20070315
                        A1 20040219 CA 2003-2492325
A1 20040219 WO 2003-US24087
     CA 2492325
                                                                              20030729
     WO 2004014382
                                                                              20030729
          PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003265336 A1 20040225 AU 2003-265336
                                                                            20030729
                            В2
     AU 2003265336
                                   20080619
     EP 1534286
                                                 EP 2003-784871
                             A1
                                     20050601
                                                                              20030729
     EP 1534286
                             В1
                                    20091209
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003013059 A
                                   20050705
                                                 BR 2003-13059 20030729
     CN 1678321
JP 2006514989
T 20060518
JP 2005-506142
NZ 537752
A 2006022
NZ 2003-537752
ZA 2005000775
A 20080625
CN 101514191
A 20090826
CN 2009-10006771
EP 2130541
A2 20091209
EP 2009-4539
CT DE. DK, EE, ES, FI, FR,
     CN 1678321
                                    20051005
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                                                                             20030729
                            Α
                                                                            20030729
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                                                CN 2009-10006771
                                                                            20030729
                                                EP 2009-4539
                                                                             20030729
          R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
               IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, LT, LV, MK
                                     20091215
                                                  AT 2003-784871
     AT 451104
                             Т
                                                                            20030729
     RU 2376992
                             C2
                                     20091227
                                                   RU 2005-105344
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                            Т3
     ES 2337782
                                                   ES 2003-784871
                                    20100429
                                                                             20030729
                            A2
     HR 2005000089
                                                   HR 2005-89
                                                                             20050126
                                    20070831
                            A
A
                                                   SE 2005-203
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     IN 2005KN00302
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                                     20060421
                                                                             20050228
                                                  HK 2005-110991
US 2005-299207
     HK 1079978 A1 20100723
US 20060135543 A1 20060622
US 7435814 B2 20081014
US 20070299095 A1 20071227
US 20080039622 A1 20080214
US 7550460 B2 20090623
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US 2007-782581 20070724
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US 20090082567
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                         Ρ
PRAI US 2002-399673P
                               20020729
    US 2003-443949P
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                               20030131
    US 2003-452339P
                         Ρ
                               20030306
    US 2002-353267P
                         Ρ
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    US 2002-353333P
                         Ρ
                               20020201
    US 2002-434277P
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    US 2003-355543
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                         A3
    CN 2003-821120
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    US 2006-539054
                         Α3
                               20061005
    US 2006-539101
                               20061005
                         Α1
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Title compds. I [wherein L1 and L2 = independently a bond; R2, R4 = independently (un) substituted Ph, 5-15 membered heteroaryl; ; R5 = CN, NC, NO2, F, (per)haloalkyl, (per)haloalkoxy, COCF3, etc.; R6 = H; with provisos and exclusions; and salts, hydrates, solvates, N-oxides, and prodrugs thereof] were prepared as inhibitors of the IqE and/or IqG receptor signaling cascades that lead to the release of chemical mediators. For example, coupling of 2,4-dichloropyrimidine with 4-ethoxyaniline in EtOH provided N2,N4-bis(4-ethoxyphenyl)-2,4-pyrimidinediamine (II). The latter inhibited degranulation of bone marrow derived mast cells challenged with anti-IgE and ionomycin with IC50 values of 4.5  $\mu\text{M}$  and 4.4  $\mu\text{M}$ , resp. Thus, I and their pharmaceutical compns. are useful in the treatment and prevention of diseases characterized by, caused by, or associated with the release of chemical mediators via degranulation of mast, basophil, neutrophil, or eosinophil cells and other processes effected by activation of the IgE and/or IgG receptor signaling cascades. Specific examples of autoimmune diseases that can be treated or prevented with I and their pharmaceutical compns. include rheumatoid arthritis, systemic lupus erythematosis, and multiple sclerosis (no data).

IT 575484-59-2P 575484-65-0P 662227-39-6P 662227-46-5P 662227-55-6P 662227-67-0P

RN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgE and/or IgG receptor modulator; preparation of pyrimidinediamines as IgE and/or IgG receptor modulators for treatment of autoimmune diseases) 575484-59-2 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-methyl- (CA INDEX NAME)

RN 575484-65-0 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-(1-methylethyl)- (CA INDEX NAME)

RN 662227-39-6 CAPLUS

CN Benzamide, N-(2-aminoethyl)-5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-(trifluoromethoxy)- (CA INDEX NAME)

RN 662227-46-5 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-2-(trifluoromethoxy)- (CA INDEX NAME)

RN 662227-55-6 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-[2-(methylamino)ethyl]-2-(trifluoromethoxy)- (CA INDEX NAME)

RN 662227-67-0 CAPLUS

CN Benzamide, N-[(2R)-2,3-dihydroxypropyl]-5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-(trifluoromethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 277 THERE ARE 277 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 21 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2009:293033 CAPLUS
ΑN
DN
      150:306669
      Pyrimidine derivatives as IGF-1R and ALK inhibitors and their preparation,
ΤI
      pharmaceutical compositions and use in the treatment of diseases
IN
      Marsilje, Thomas H.; Lu, Wenshuo; Chen, Bei; He, Xiaohui; Bursulaya,
      Badry; Lee, Christian Cho-Hua; Gray, Nathanael S.
      IRM LLC, Bermuda
PA
      PCT Int. Appl., 92 pp.
SO
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 4
                                        DATE
      PATENT NO.
                               KIND
                                                       APPLICATION NO.
                                                                                     DATE
                                                       _____
                               ____
                                                                                     ______
                                        20090312
      WO 2009032668
                                A2
                                                       WO 2008-US74392
                                                                                    20080827
PΙ
      WO 2009032668
                                А3
                                        20090924
          2009032668

A3 20090924

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD,
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      AU 2008296545
                                     20090312
                                                    AU 2008-296545
                               A1
                                                                                     20080827
      CA 2696824
                                                       CA 2008-2696824
                                Α1
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                                                                                     20080827
                                                       KR 2010-706599
      KR 2010050557
                                Α
                                        20100513
                                                                                     20080827
                                Α2
                                        20100602
                                                       EP 2008-798753
                                                                                     20080827
      EP 2190826
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                IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI,
                SK, TR, AL, BA, MK, RS
      MX 2010002336
                                        20100325
                                                      MX 2010-2336
                                                                                     20100226
                               Α
      IN 2010DN01657
                                        20100806
                                                       IN 2010-DN1657
                                                                                     20100310
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PRAI US 2007-966449P
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                                        20070828
      US 2008-75556P
                               Ρ
                                        20080625
      WO 2008-US74392
                                W
                                        20080827
OS
      MARPAT 150:306669
      The invention provides pyrimidine derivs. of formula I and their
AB
      pharmaceutical compns. thereof, and methods for using such compds.
      Pyrimidine derivs. of formula I may be used to treat, ameliorate or
      prevent a condition which responds to inhibition of insulin-like growth
      factor (IGF-1R) or anaplastic lymphoma kinase (ALK). Compds. of formula I
      wherein R1a is H, halo, OR8, NRR8, SR8, (un)substituted C1-6 alkyl,
      (un) substituted C1-6 alkoxy, C2-6 alkenyl, (un) substituted C2-6 alkynyl,
      etc.; R1b is H and NH2; R3 and R4 are independently H, COR7 and (halo)C1-6
      alkyl; each of R5-R7 is independently (un) substituted C1-6 alkyl,
      (un) substituted C1-6 alkoxy, (un) substituted C2-6 alkenyl, (un) substituted C2-6 alkynyl, halo, NO2, CN, OR8, etc.; two adjacent R5 may taken together
      with the carbon atom attached to form (un)substituted 9- to 14-membered
      ring; R7-R9 are independently (CR2)0-4-Y, (un)substituted C1-6 alkyl,
      (un)substituted C1-6 alkoxy, (un)substituted C2-6 alkenyl and
      (un) substituted C2-6 alkynyl; R7 and R8 may be H; R is H and C1-6 alkyl; Y
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is (un)substituted C3-12 (hetero)cyclic ring, (un)substituted C6-10 aryl, (un)substituted C5-10 heteroaryl and heterocyclic ring; m is 1-4; n is 0-4; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by N-arylation of 4'-amino-5'-fluoro-N,2'-dimethylbiphenyl-4-carboxamide with 2,5-dichloro-N-(5-methyl-1H-pyrazol-3-yl)pyrimidin-4-amine. All the invention compds. were evaluated for their kinase inhibitory activity. From the assay, it was determined that some of the tested compds. exhibited the IC50 value of < 1 nM.

IT 1129409-71-7P 1129409-73-9P 1129409-74-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(drug candidate; preparation of pyrimidine derivs. as IGF-1R and ALK inhibitors useful in treatment of diseases)

RN 1129409-71-7 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-[[5-chloro-4-[[2-[[[2-(dimethylamino)ethyl]amino]carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-5'fluoro-N,2'-dimethyl- (CA INDEX NAME)

RN 1129409-73-9 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-[[4-[[2-[[(2-aminoethyl)amino]carbonyl]phenyl]amino]-5-chloro-2-pyrimidinyl]amino]-5'-fluoro-N,2'-dimethyl- (CA INDEX NAME)

RN 1129409-74-0 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-[[5-chloro-4-[[2-[[(2-hydroxyethyl)amino]carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-5'-fluoro-N,2'-dimethyl- (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 22 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2009:277182 CAPLUS

DN 150:413026

TI SVM Model for Virtual Screening of Lck Inhibitors

AU Liew, Chin Y.; Ma, Xiao H.; Liu, Xianghui; Yap, Chun W.

CS Pharmaceutical Data Exploration Laboratory, Department of Pharmacy, National University of Singapore, Singapore

SO Journal of Chemical Information and Modeling (2009), 49(4), 877-885 CODEN: JCISD8; ISSN: 1549-9596

PB American Chemical Society

DT Journal

LA English

AB Lymphocyte-specific protein tyrosine kinase (Lck) inhibitors have treatment potential for autoimmune diseases and transplant rejection. A support vector machine (SVM) model trained with 820 pos. compds. (Lck inhibitors) and 70 neg. compds. (Lck noninhibitors) combined with 65 142 generated putative negatives was developed for predicting compds. with a Lck inhibitory activity of IC50  $\leq$  10  $\mu\text{M}$ . The SVM model, with an estimated sensitivity of greater than 83% and specificity of greater than 99%, was used to screen 168 014 compds. in the MDDR and was found to have a yield of 45.8% and a false pos. rate of 0.52%. The model was also able to identify novel Lck inhibitors and distinguish inhibitors from structurally similar noninhibitors at a false pos. rate of 0.27%. To the best of our knowledge, the SVM model developed in this work is the first model with a broad applicability domain and low false pos. rate, which makes it very suitable for the virtual screening of chemical libraries for Lck inhibitors.

IT 944795-19-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(SVM model for virtual screening of Lck inhibitors)

RN 944795-19-1 CAPLUS

CN Benzamide, 3-[[2-[[3-(aminocarbonyl)phenyl]amino]-4-pyrimidinyl]amino]-N,N,4-trimethyl- (CA INDEX NAME)

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 23 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:39051 CAPLUS
- DN 150:89997
- TI Inhibition of focal adhesion kinase as a potential therapeutic strategy for imatinib-resistant gastrointestinal stromal tumor
- AU Sakurama, Kazufumi; Noma, Kazuhiro; Takaoka, Munenori; Tomono, Yasuko; Watanabe, Nobuyuki; Hatakeyama, Shinji; Ohmori, Osamu; Hirota, Seiichi; Motoki, Takayuki; Shirakawa, Yasuhiro; Yamatsuji, Tomoki; Haisa, Minoru; Matsuoka, Junji; Tanaka, Noriaki; Naomoto, Yoshio
- CS Department of Gastroenterological Surgery, Transplant, and Surgical Oncology, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama University, Okayama, 700-9558, Japan
- SO Molecular Cancer Therapeutics ((2009), 8(1), 127-134 CODEN: MCTOCF; ISSN: 1535-7163
- PB American Association for Cancer Research
- DT Journal
- LA English
- AΒ Focal adhesion kinase (FAK) is often up-regulated in a variety of malignancies, including gastrointestinal stromal tumor (GIST), and its overexpression seems to be associated with tumor progressiveness and poor prognosis. GIST is well known to have a mutation to c-KIT; thus, a specific c-KIT inhibitor (imatinib) is recognized as the first-line chemotherapy for GIST, although a certain type of c-KIT mutation reveals a resistance to imatinib due to as yet uncertain mol. mechanisms. To assess the c-KIT mutation-related variation of cellular responses to imatinib, murine lymphocyte-derived Ba/F3 cells, which are stably transduced with different types of c-KIT mutation, were treated with either imatinib or a FAK inhibitor (TAE226), and their antitumor effects were determined in vitro and in vivo. A mutation at exon 11 (KITdel559-560) displayed a high sensitivity to imatinib, whereas that at exon 17 (KIT820Tyr) showed a significant resistance to imatinib in vitro and in vivo. KIT820Tyr cells appeared to maintain the activities of FAK and AKT under the imatinib treatment, suggesting that FAK might play a role in cell survival in imatinib-resistant cells. When FAK activity in those cells was inhibited by TAE226, cell growth was equally suppressed and the cells underwent apoptosis regardless of the c-KIT mutation types. Oral administration of TAE226 significantly diminished tumor growth in nude mice bearing KIT820Tyr xenografts. In summary, c-KIT mutation at exon 17 displayed a resistance to imatinib with maintained activations of FAK and subsequent survival signals. Targeting FAK could be a potential therapeutic strategy for imatinib-resistant GISTs.
- IT 761437-28-9
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhibition of focal adhesion kinase with TAE226 as a potential therapeutic strategy for imatinib-resistant gastrointestinal stromal tumor)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:36532 CAPLUS
- DN 150:555130
- TI TAE226, a dual inhibitor for FAK and IGF-IR, has inhibitory effects on mTOR signaling in esophageal cancer cells
- AU Wang, Zhi Gang; Fukazawa, Takuya; Nishikawa, Toshio; Watanabe, Nobuyuki; Sakurama, Kazufumi; Motoki, Takayuki; Takaoka, Munenori; Hatakeyama, Shinji; Omori, Osamu; Ohara, Toshiaki; Tanabe, Shunsuke; Fujiwara, Yasuhiro; Shirakawa, Yasuhiro; Yamatsuji, Tomoki; Tanaka, Noriaki; Naomoto, Yoshio
- CS College of Life Science, The Key Laboratory of Mammal Reproductive Biology and Biotechnology, Ministry of Education, Inner Mongolia University, Huhhot, 010021, Peop. Rep. China
- SO Oncology Reports (2008), 20(6), 1473-1477 CODEN: OCRPEW; ISSN: 1021-335X
- PB Oncology Reports
- DT Journal
- LA English
- AΒ Esophageal cancer is one of the most aggressive cancers in the world. Novel preventive and therapeutic strategies tend to target the key mols. involved in the signaling transduction pathways for cell growth. It is known that FAK and mTOR are important controllers of cell growth. TAE226, a novel small mol. compound, is a potent ATP competitive inhibitor of FAK and IGF-IR. TAE226 can block FAK and IGF-IR signaling pathways. The purpose of this study was to explore the inhibitory effects on mTOR signaling and the mechanism of cell growth suppression by TAE226. We examined the expression of mTOR and S6 in esophageal cancer cells (SEG-1) and normal esophageal epithelial cells (KOB-13) and the efficacy of TAE226 against SEG-1 cells. MTOR and S6 were overexpressed in SEG-1 cells compared with KOB-13 cells. TAE226 inhibited the expression of mTOR, Akt, p70S6K and S6 as well as the phosphorylation of mTOR (Ser2448), Akt (Ser 473), p70S6K (Thr389) and S6 (Ser 240/244). As a result, TAE226 induced a dose-dependent decrease in cell growth (number) and damage in the cell shape. Together, these data show that TAE226 has potent inhibitory effects on mTOR signaling and esophageal cancer cell growth indicating that TAE226 has potential application in esophageal cancer treatment. ΙT 761437-28-9
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (TAE226, dual inhibitor for FAK and IGF-IR, has inhibitory effects on mTOR signaling in esophageal cancer cells)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G	5	THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT	29	THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
		ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2008:1477507 CAPLUS

DN 151:26548

TI Crystal structures of the FAK kinase in complex with TAE 226 and related bis-anilino pyrimidine inhibitors reveal a helical DFG conformation

AU Lietha, Daniel; Eck, Michael J.

CS Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, MA, USA

SO PLOS One (2008), 3(11), No pp. given CODEN: POLNCL; ISSN: 1932-6203 URL: http://www.plosone.org/article/info%3Adoi

URL: http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.00 03800

PB Public Library of Science

DT Journal; (online computer file)

LA English

RN

Focal adhesion kinase (FAK) is a non-receptor tyrosine kinase required for AΒ cell migration, proliferation and survival. FAK overexpression has been documented in diverse human cancers and is associated with a poor clin. outcome. Recently, a novel bis-anilino pyrimidine inhibitor, TAE 226, was reported to efficiently inhibit FAK signaling, arrest tumor growth and invasion, and prolong the life of mice with glioma or ovarian tumor implants. Here, the authors describe the crystal structures of FAK kinase bound to TAE 226 and to 3 related bis-anilino pyrimidine compds. TAE 226 induced a conformation of the N-terminal portion of the kinase activation loop that was only observed in FAK, but was distinct from the conformation in both the active and inactive states of the kinase. This conformation appeared to require a Gly residue immediately N-terminal to the "DFG motif", which adopted a helical conformation stabilized by interactions with TAE 226. The presence of a Gly residue in this position contributed to the specificity of TAE 226 and related compds. for FAK. This work highlights the fact that kinases can access conformational space that is not necessarily utilized for their native catalytic regulation, and that such conformations can explain and be exploited for inhibitor specificity. ΤТ

761437-28-9D, complexes with FAK kinase RL: BSU (Biological study, unclassified); DMA (Drug mechanism of action); PEP (Physical, engineering or chemical process); PRP (Properties); BIOL (Biological study); PROC (Process)

(crystal structures of FAK kinase in complex with TAE 226 and related bis-anilinopyrimidine inhibitors reveal a helical DFG conformation) 761437-28-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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ANSWER 26 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
    2008:1450755 CAPLUS
ΑN
    150:20148
DN
    Preparation of substituted 2-[(3-pyridylamino)-2-
ΤI
    pyrimidinyl]anthranilamides as Aurora kinase inhibitors
ΙN
    Axten, Jeffrey Michael; Betancourt, Jesus R. Medina; Johnson, Neil W.;
    Semones, Marcus
    SmithKline Beecham Corporation, USA
PA
    PCT Int. Appl., 55pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
                               DATE
                                           APPLICATION NO.
    PATENT NO.
                        KIND
                                                                  DATE
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                                _____
                                                                  ______
                               20081204
                                         ) WO 2008-US64446
    WO 2008147831
                                                                 20080522
РΤ
                         A1
        W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
        TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2007-939624P
                        Ρ
                            20070523
    CASREACT 150:20148; MARPAT 150:20148
OS
    Title compds. I (R1 = H, C1-6 alkyl, C3-6 cycloalkyl, C3-6
AΒ
    cycloalkylmethyl, C1-6 hydroxyalkyl; R2 = Me, F, C1; R3 = nitrogen-containing
    5- or 6-membered heterocycle), or pharmaceutically acceptable salts
    thereof, are prepared as Aurora kinase inhibitors. Thus, reaction of
    2,4-dibromo-5-methylpyrimidine with 2-amino-N-isopropylbenzamide, followed
    by further reaction with 6-(4-methyl-2-piperazinyl)-3-pyridinamine gave
    title compd II, isolated as the HCl salt. The prepared compds. were tested
    for Aurora A/TPX12 and Aurora B/INCENP protein kinase inhibitory
    activities in substrate phosphorylation assays (no data).
    1089653-50-8P
                      1089653-62-2P
                                        1089653-63-3P
TΤ
    1089653-64-4P
                      1089653-68-8P
                                        1089653-71-3P
    1089653-72-4P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of substituted 2-[(3-pyridylamino)-2-
       pyrimidinyl]anthranilamides as Aurora kinase inhibitors)
    1089653-50-8 CAPLUS
RN
CN
    Benzamide, 2-[[5-fluoro-2-[[6-(4-methyl-1-piperazinyl)-3-pyridinyl]amino]-
     4-pyrimidinyl]amino]-N-(1-methylethyl)-, hydrochloride (1:1) (CA INDEX
    NAME)
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### ● HCl

RN 1089653-62-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[6-(4-methyl-1-piperazinyl)-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1089653-63-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[6-(4-morpholinyl)-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1089653-64-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(1,6-dihydro-6-oxo-3-pyridinyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1089653-68-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-(4-methyl-1-piperazinyl)-5-pyrimidinyl]amino]-4-pyrimidinyl]amino]-N-methyl-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 1089653-67-7 CMF C21 H24 C1 N9 O

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1089653-71-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[5-methyl-6-(4-methyl-1-piperazinyl)-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-, hydrochloride

# (1:1) (CA INDEX NAME)

● HCl

RN 1089653-72-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[6-[(8aR)-hexahydropyrrolo[1,2-a]pyrazin-2(1H)-y1]-5-methyl-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-(CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 27 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
         2008:1360637 CAPLUS
ΑN
         149:553338
DN
         Genetic polymorphisms associated with an increased risk of
ΤI
         neurodegenerative disease and their detection and diagnostic and
         prophylactic use
         Grupe, Andrew; Li, Yonghong
ΙN
         Applera Corporation, USA
PA
         PCT Int. Appl., 137pp.
SO
         CODEN: PIXXD2
DT
         Patent
LA
         English
FAN.CNT 1
                                                               DATE
                                                                                    APPLICATION NO.
         PATENT NO.
                                                KIND
                                                                                                                                   DATE
                                                                                     _____
                                                ____
                                                                                                                                 _____
                                                 A1
                                                                                   WO 2008-US5734
         WO 2008137110
                                                            20081113
                                                                                                                                  20080501
РΤ
                 W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
                 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TD, BE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, RE, BI, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, CC, CM, CA, CM, CA
                         TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
                         TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
                         AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                                           A1 20081120
         US 20080286796
                                                                                   US 2008-151163
                                                                                                                                    20080501
                                                 Ρ
                                                               20070503
PRAI US 2007-927864P
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
         The present invention is based on the discovery of genetic polymorphisms
AΒ
         that are associated with neurodegenerative disease, particularly Alzheimer's
         disease and Parkinson's disease. In particular, the present invention
         relates to nucleic acid mols. containing the polymorphisms, variant proteins
         encoded by such nucleic acid mols., reagents for detecting the polymorphic
         nucleic acid mols. and proteins, and methods of using the nucleic acid and
         proteins as well as methods of using reagents for their detection. An
         anal. of genetic polymorphisms surrounding the NEDD9 gene is reported.
         Expression of the NEDD9 gene is lower in the hippocampus of Alzheimer's
         disease patients than in controls. A number of polymorphisms around the gene
         were shown to be associated with an increased risk of Alzheimer's disease.
         761437-28-9, NVP-TAE-226
ΙT
         RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
                (in treatment of Alzheimer's disease; genetic polymorphisms associated
               with increased risk of neurodegenerative disease and their detection
                and diagnostic and prophylactic use)
         761437-28-9 CAPLUS
RN
CN
         Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholiny1)pheny1]amino]-4-
```

pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 28 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2008:1009042 CAPLUS
ΑN
DN
      149:293683
      Combinations of therapeutic agents comprising
ΤI
      N-hydroxy-3-[4-[[[2-(2-methyl-1H-indol-3-yl)-ethyl]-amino]methyl]phenyl]-
      2E-2-propenamide for treating cancer
ΙN
      Atadja, Peter Wisdom; Shao, Wenlin; Bhalla, Kapil N.
      Novartis A.-G., Switz.
PA
      PCT Int. Appl., 73pp.
SO
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
      PATENT NO.
                              KIND
                                        DATE
                                                      APPLICATION NO.
                                                                                    DATE
                                        Marine Commence
                               ____
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                                                                                    _____
      WO 2008100985
                                A2
                                        20080821
                                                      WO 2008-US53798
                                                                                    20080213
РΤ
                                A3
      WO 2008100985
                                        20081030
          2008100985

A3 20081030

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD,
                TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
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                AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                                        20080821 AU 2008-216327
      AU 2008216327
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      CA 2677651
                                Α1
                                        20080821
                                                      CA 2008-2677651
                                                                                    20080213
                                                       AR 2008-100618
      AR 65335
                                Α1
                                        20090603
                                                                                    20080213
      KR 2009110913
                                        20091023
                                                       KR 2009-716980
                                Α
                                                                                    20080213
      EP 2120900
                                Α2
                                        20091125
                                                       EP 2008-729719
                                                                                    20080213
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                IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI,
      JP 2010519209
                                        20100603
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      ZA 2009005159
                                Α
                                        20100526
                                                       ZA 2009-5159
                                                                                    20090723
      MX 2009008584
                                        20090818
                                                       MX 2009-8584
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      US 20100069458
                               A1
                                        20100318
                                                       US 2009-526962
                                                                                    20090813
      CN 101626758
                                Α
                                        20100113
                                                       CN 2008-80005098
                                                                                    20090814
      IN 2009DN05679
                                                       IN 2009-DN5679
                                Α
                                        20100528
                                                                                    20090902
PRAI US 2007-890005P
                                Р
                                        20070215
      WO 2008-US53798
                                W
                                        20080213
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
      The invention relates to a combination comprising the
      N-hydroxy-3-[4-[[[2-(2-methyl-1H-indol-3-yl)-ethyl]-amino]methyl]phenyl]-
      2E-2-propenamide; and one or more pharmaceutically active agents;
      pharmaceutical compns. comprising said combination; methods of treatment
      comprising said combination; processes for making said combination; and a
      com. package comprising said combination. Thus, combination of LBH589 and
      velcade exhibited synergistic efficiency in treating pancreatic tumor,
      tested with MIA PaCa-2 cells.
      761437-28-9
ΙT
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
```

(Biological study); USES (Uses)

(combinations of the rapeutic agents comprising N-hydroxy-3-[4-[[[2-(2-Me-1H-indol-3-yl)-ethyl]-amino]methyl] phenyl]-2E-2-propenamide for treating cancer)

RN 761437-28-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

```
ANSWER 29 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2008:916378 CAPLUS
ΑN
DN
      149:224273
      Anthranilamide inhibitors of aurora kinase and their preparation,
ΤI
      pharmaceutical compositions and use in the treatment of cancer
ΙN
      Axten, Jeffrey Michael; Bryan, Deborah L.; Drewry, David Harold; Faitg,
      Thomas H.; Gallagher, Thimothy Francis; Johnson, Neil W.; Kasparec, Jiri;
      Ralph, Jeffrey M.; Silva, Domingos J.
      Smithkline Beecham Corporation, USA
PA
SO
      PCT Int. Appl., 98pp.
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 1
                                        DATE
                               KIND
                                                      APPLICATION NO.
      PATENT NO.
                                                                                   DATE
                                                      _____
                               ____
                                        _____
      WO 2008092049
                                        20080731
                                                     WO 2008-US51985 20080125
PΙ
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, MI, MR, NE, SN, TD,
                TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
                TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
                AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                                                    AR 2008-100292
      AR 65015
                                        20090513
                               A1
                                                                                    20080124
                                                                                    20080125
      AU 2008207809
                                Α1
                                        20080731
                                                       AU 2008-207809
                                                      CA 2008-2676257
      CA 2676257
                                Α1
                                        20080731
                                                                                    20080125
      US 20080182852
                                        20080731
                                                      US 2008-19730
                                Α1
                                                                                    20080125
      US 7625903
                                В2
                                        20091201
                                                       EP 2008-728247
      EP 2121637
                                Α1
                                        20091125
                                                                                    20080125
               AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
                IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI,
                SK, TR
      JP 2010516780
                                        20100520
                                                       JP 2009-547435
                                                                                    20080125
      US 20100016318
                                Α1
                                        20100121
                                                       US 2009-524009
                                                                                    20090722
PRAI US 2007-886676P
                                Ρ
                                        20070126
      WO 2008-US51985
                                W
                                        20080125
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
      MARPAT 149:224273
OS
AΒ
      The invention relates to a compound represented by formula I or a
      pharmaceutically acceptable salt thereof. Compds. of the invention are
      useful in the treatment of diseases associated with Aurora kinase activity
      such as cancer. Compds. of formula I wherein each R1 is H, (CH2)0-3-N(R5)2, O(CH2)2-3-N(R5)2, CON(R5)2, CO2H, etc.; R2 is H, halo,
      C1-3 alkyl, C1-3 alkoxy, CN, NO2, and CF3; each R3 is H, heterocycloalkyl,
      cycloalkyl, Ph, etc.; R4 is halo, C1-3 alkyl and C1-3 alkoxy; each R5 is
      independently C1-6 alkyl and COCH3; R5R5N taken together to form a
      (un) substituted 5- to 6-membered heterocyclic ring; and their
      pharmaceutically acceptable salts thereof, are claimed. Example compound II
      was prepared by amination of 2-[(2,5-dichloro-4-pyrimidinyl)amino]benzamide
      with 3-(1-pyrrolidinylmethyl)aniline. All the invention compds. were
      evaluated for their aurora kinase inhibitory activity.
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## 10/568,367 (RCE)

IT 1042434-40-1P 1042434-63-8P 1042434-64-9P

1042434-66-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate and intermediate; preparation of anthranilamide as aurora kinase inhibitors useful in the treatment of cancer)

RN 1042434-40-1 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholiny1)ethy1]pheny1]amino]-4-pyrimidiny1]amino]-N-[2-(methylthio)ethy1]- (CA INDEX NAME)

RN 1042434-63-8 CAPLUS

CN Benzoic acid, 4-[[5-fluoro-4-[[2-[[(1-methylethyl)amino]carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-, ethyl ester (CA INDEX NAME)

RN 1042434-64-9 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-(hydroxymethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042434-66-1 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[(4-formylphenyl)amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

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1042433-15-7P
                  1042433-17-9P
                                     1042433-18-0P
                  1042433-20-4P
1042433-19-1P
                                     1042433-21-5P
1042433-22-6P
                  1042433-23-7P
                                     1042433-54-4P
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1042434-70-7P
                  1042434-71-8P
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1042434-73-0P
                  1042434-75-2P
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of anthranilamide as aurora kinase inhibitors useful in the treatment of cancer)

RN 1042432-55-2 CAPLUS

CN

Benzamide, 2-[[5-chloro-2-[[3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-56-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{C1} & \text{N} & \text{NH} & \text{CH}_2\text{--}\text{CH}_2\text{---}\text{N} \\ & \text{C--} & \text{NHMe} \\ & \text{O} & & \\ \end{array}$$

RN 1042432-57-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-58-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-morpholiny1)pheny1]amino]-4-pyrimidiny1]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-59-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-2-oxo-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-60-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[4-(4-morpholinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-61-0 CAPLUS

CN Benzoic acid, 4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]- (CA INDEX NAME)

RN 1042432-62-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-morpholinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-63-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-64-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(1-methylethyl)-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-65-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-66-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(methylsulfonyl)methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-68-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-70-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-methoxy-3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-71-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-72-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042432-73-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 1042432-74-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 1042432-75-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

- RN 1042432-76-7 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

- RN 1042432-77-8 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

- RN 1042432-78-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042432-79-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[4-(diethylamino)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042432-80-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042432-81-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)- (CA INDEX NAME)

RN 1042432-82-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholiny1)ethy1]pheny1]amino]-4-pyrimidiny1]amino]-N-(2-hydroxyethy1)- (CA INDEX NAME)

RN 1042432-83-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)- (CA INDEX NAME)

RN 1042432-84-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 1042432-86-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 1042432-87-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2,2,2-trifluoroethyl)- (CA INDEX NAME)

RN 1042432-91-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-[2-(methylamino)ethyl]- (CA INDEX NAME)

RN 1042432-92-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 1042433-14-6 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042433-15-7 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

$$\begin{array}{c|c} F & N & \\ NH & NH & CH_2-CH_2-N & O \\ \hline C-NHMe & \\ O & \end{array}$$

RN 1042433-17-9 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042433-18-0 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 1042433-19-1 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-20-4 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-21-5 CAPLUS

CN Benzamide, 2-[[2-[[3-[4-(diethylamino)-1-piperidinyl]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-22-6 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[(methylsulfonyl)methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-23-7 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-54-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 1042433-55-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 1042433-56-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-2-oxo-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 1042433-57-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(methylsulfonyl)methyl]phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 1042433-59-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-methoxy-3-(1-pyrrolidinylmethyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 1042433-60-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 1042433-61-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl-(CA INDEX NAME)

RN 1042433-62-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl-(CA INDEX NAME)

RN 1042433-63-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(1-methylethyl)-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl-(CA INDEX NAME)

RN 1042433-68-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-69-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-71-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-2-oxo-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-72-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-73-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(1-methylethyl)-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl-(CA INDEX NAME)

RN 1042433-74-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl-(CA INDEX NAME)

RN 1042433-75-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl-(CA INDEX NAME)

RN 1042433-76-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-77-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-2-oxo-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-78-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-79-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(1-methylethyl)-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)-(CA INDEX NAME)

RN 1042433-80-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-methyl-1-piperazinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-81-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-82-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-83-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(3,4-dimethyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-6-fluoro-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042433-85-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4-fluoro-N-methyl-(CA INDEX NAME)

RN 1042433-86-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-4-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-87-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-2-oxo-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-4-fluoro-N-methyl- (CA INDEX NAME)

RN 1042433-96-4 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RN 1042433-97-5 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-methyl-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

## ●x HCl

RN 1042433-98-6 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

## ●x HCl

RN 1042433-99-7 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[4-(1-methylethyl)-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

•x HCl

RN 1042434-00-3 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RN 1042434-01-4 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-methoxy-3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RN 1042434-02-5 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[2-(4-methyl-1-piperazinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

•x HCl

RN 1042434-03-6 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-(4-methyl-2-oxo-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RN 1042434-04-7 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-methyl-5-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

## ●x HCl

RN 1042434-05-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-[(1S)-2-hydroxy-1-methylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-06-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-[(1R)-2-hydroxy-1-methylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-12-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-[(2S)-2-hydroxypropyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-13-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-[(2R)-2-hydroxypropyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-16-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-[(1R)-2-hydroxy-1-methylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-17-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-[(1S)-2-hydroxy-1-methylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 1042434-19-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-[(tetrahydro-2-furanyl)methyl]- (CA INDEX NAME)

RN 1042434-30-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1,3-dioxolan-2-ylmethyl)- (CA INDEX NAME)

RN 1042434-36-5 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-(CA INDEX NAME)

RN 1042434-37-6 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[(4-methyl-1-piperazinyl)carbonyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-(CA INDEX NAME)

RN 1042434-41-2 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-

pyrimidinyl]amino]-N-[2-(methylsulfinyl)ethyl]- (CA INDEX NAME)

RN 1042434-42-3 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-[2-(methylsulfonyl)ethyl]- (CA INDEX NAME)

RN 1042434-46-7 CAPLUS

CN Benzamide, 2-[[2-[[4-[[[2-(ethylamino)ethyl]sulfonyl]methyl]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{C} & \mathbf{C} \\ \mathbf{C} \\$$

RN 1042434-47-8 CAPLUS

CN Benzamide, 2-[[2-[[4-[[[2-(ethylamino)ethyl]sulfonyl]methyl]phenyl]amino]-

5-fluoro-4-pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-46-7 CMF C25 H31 F N6 O3 S

$$\begin{array}{c|c} \mathbf{C} & \mathbf{C} \\ \mathbf{C} \\$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-49-0 CAPLUS

CN Benzamide, 2-[[2-[[4-[[[2-(diethylamino)ethyl]sulfonyl]methyl]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-48-9 CMF C27 H35 F N6 O3 S

$$\begin{array}{c|c} \mathsf{Et_2N-CH_2-CH_2-CH_2-S-CH_2} \\ & \mathsf{O} \\ & & \mathsf{NH} \\ & & \mathsf{NNH} \\ & & \mathsf{NNH} \\ & & \mathsf{NNH} \\ & & \mathsf{NNH} \\ & & \mathsf{NH} \\ & & & \mathsf{NH} \\ & & \mathsf{NH}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-51-4 CAPLUS CN Benzamide, 2-[[2-[[4-

Benzamide, 2-[[2-[[4-[[[2-(dimethylamino]-5-fluoro-4-(pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-50-3 CMF C25 H31 F N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-53-6 CAPLUS

CN Benzamide, 2-[[2-[[4-[[(2-aminoethyl)sulfonyl]methyl]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-52-5 CMF C23 H27 F N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-55-8 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[[2-(4-methyl-1-piperazinyl)ethyl]sulfonyl]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-54-7 CMF C28 H36 F N7 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-57-0 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[[2-(4-morpholinyl)ethyl]sulfonyl]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-56-9 CMF C27 H33 F N6 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-59-2 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[[2-(methylamino)ethyl]sulfonyl]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1042434-58-1 CMF C24 H29 F N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 1042434-60-5 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-(4-piperidinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RN 1042434-62-7 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-(4-piperidinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

RN 1042434-67-2 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[[2-(methylsulfonyl)ethyl]amino]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042434-68-3 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[(2-hydroxyethyl)amino]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042434-69-4 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[[2-[(2-hydroxyethyl)sulfonyl]ethyl]amino]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042434-70-7 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[(2-methoxyethyl)amino]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042434-71-8 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[(5R)-5-methyl-2-oxo-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-72-9 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[(5S)-5-methyl-2-oxo-1-piperazinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1042434-73-0 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[3-[2-(4-morpholinyl)ethyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(2-hydroxyethyl)- (CA INDEX NAME)

RN 1042434-75-2 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-(4-piperidinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

IT 1042435-07-3P 1042435-09-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of anthranilamide as aurora kinase inhibitors useful in the treatment of cancer)

RN 1042435-07-3 CAPLUS

CN Benzamide, 2-[[5-fluoro-2-[[4-[[(2-hydroxyethyl)sulfonyl]methyl]phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1042435-09-5 CAPLUS

CN Benzamide, 2-[[2-[[4-[(ethenylsulfonyl)methyl]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{H}_2\text{C} = \text{CH} - \text{S} - \text{CH}_2 \\ \text{O} \\ \text{NH} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{O} \\ \end{array}$$

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2008:855179 CAPLUS
- DN 150:15783
- TI Dual Tyrosine Kinase Inhibitor for Focal Adhesion Kinase and Insulin-like Growth Factor-I Receptor Exhibits Anticancer Effect in Esophageal Adenocarcinoma In vitro and In vivo
- AU Watanabe, Nobuyuki; Takaoka, Munenori; Sakurama, Kazufumi; Tomono, Yasuko; Hatakeyama, Shinji; Ohmori, Osamu; Motoki, Takayuki; Shirakawa, Yasuhiro; Yamatsuji, Tomoki; Haisa, Minoru; Matsuoka, Junji; Beer, David G.; Nagatsuka, Hitoshi; Tanaka, Noriaki; Naomoto, Yoshio
- CS Department of Gastroenterological Surgery, Transplant, and Surgical Oncology, Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Citizens Hospital, Okayama, Japan
- SO Clinical Cancer Research (2008), 14(14), 4631-4639 CODEN: CCREF4; ISSN: 1078-0432
- PB American Association for Cancer Research
- DT Journal
- LA English
- AB Focal adhesion kinase (FAK) regulates integrin and growth factor-mediated signaling pathways to enhance cell migration, proliferation, and survival, and its up-regulation correlates malignant grade and poor outcome in several types of cancer. In this study, we aimed to raise a potential therapeutic strategy using a FAK inhibitor for Barrett's esophageal adenocarcinoma. The expression status of FAK in clin. Barrett's esophageal adenocarcinoma tissues was determined by immunohistochem. Cultured esophageal adenocarcinoma cells were treated with TAE226, a specific FAK inhibitor with an addnl. effect of inhibiting insulin-like growth factor-I receptor (IGF-IR), to assess its anticancer effect in vitro. Western blot was carried out to explore a participating signaling pathway for TAE226-induced cell death. Furthermore, TAE226 was orally administered to s.c. xenograft animals to investigate its anticancer effect in vivo. Strong expression of FAK was found in 94.0% of Barrett's esophageal adenocarcinoma compared with 17.9% of Barrett's epithelia, suggesting that FAK might play a critical role in the progression of Barrett's esophageal adenocarcinoma. When esophageal adenocarcinoma cells were treated with TAE226, cell proliferation and migration were greatly inhibited with an apparent structural change of actin fiber and a loss of cell adhesion. The activities of FAK, IGF-IR, and AKT were suppressed by TAE226 and subsequent dephosphorylation of BAD at Ser136 occurred, resulting in caspase-mediated apoptosis. In vivo tumor volume was significantly reduced by oral administration of TAE226. These results suggest that TAE226, a dual tyrosine kinase inhibitor for FAK and IGF-IR, could become a new remedy for Barrett's esophageal adenocarcinoma.
- IT 761437-28-9
  - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (dual tyrosine kinase inhibitor for focal adhesion kinase and insulin-like growth factor-I receptor TAE226 exhibited anticancer effect in human Barrett's esophageal adenocarcinoma cell and mouse bearing tumor)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS) OSC.G 14

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2008:821047 CAPLUS
- DN 149:282622
- TI FAK and IGF-IR interact to provide survival signals in human pancreatic adenocarcinoma cells
- AU Liu, Weiguo; Bloom, David A.; Cance, William G.; Kurenova, Elena V.; Golubovskava, Vita M.; Hochwald, Steven N.
- CS Division of Surgical Oncology, University of Florida College of Medicine, Gainesville, FK, 32610, USA
- SO Carcinogenesis (2008), 29(6), 1096-1107 CODEN: CRNGDP; ISSN: 0,43-3334
- PB Oxford University Press
- DT Journal
- LA English
- AΒ Pancreatic cancer is a lethal disease accounting for the fourth leading cause of cancer death in USA. Focal adhesion kinase (FAK) and the insulin-like growth factor-I receptor (IGF-1R) are tyrosine kinases that activate common pathways, leading to increased proliferation and cell survival. Sparse information is available regarding their contribution to the malignant behavior of pancreatic cancer. We analyzed the relationship between FAK and IGF-1R in human pancreatic cancer cells, determined which downstream signaling pathways are altered following kinase inhibition or downregulation and studied whether dual kinase inhibition represents a potential novel treatment strategy in this deadly disease. Using immunopptn. and confocal microscopy, we show for the first time that FAK and IGF-1R phys. interact in pancreatic cancer cells and that inhibition of tyrosine phosphorylation of either kinase disrupts their interaction. Decreasing phosphorylation of either FAK or IGF-1R alone resulted in little inhibition of cell viability or increased apoptosis. However, dual inhibition of FAK, using either a dominant-neg. construct (FAK-CD) or small interfering RNA, and IGF-1R, using a specific small mol. tyrosine kinase inhibitor (AEW-541) or stable expression of a truncated, mutated IGF-1R, led to a synergistic decrease in cell proliferation and phosphorylation of extracellular signal-regulated kinase (ERK) and increase in cell detachment and apoptosis compared with inhibition of either pathway alone. Dual kinase inhibition with FAK-CD and AEW-541 resulted in a marked increase in apoptosis when FAK was displaced from the focal adhesions. Inhibition of both tyrosine kinase activities via a novel single small mol. inhibitor (TAE 226), at low doses specific for FAK and IGF-1R, resulted in significant inhibition of cell viability, decrease in phosphorylation of ERK and Akt and increase in apoptosis accompanied by cleavage of Poly (ADP-ribose) polymerase (PARP) and activation of caspase-3 in pancreatic cancer cells. Thus, simultaneous inhibition of both tyrosine kinases represents a potential novel therapeutic approach in human pancreatic adenocarcinoma.
- IT 761437-28-9
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (FAK and IGF-IR interact to provide survival signals in human pancreatic adenocarcinoma cells)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 32 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
ΑN
      2008:734100 CAPLUS
      149:79629
DN
      Preparation of N,N'-diarylpyrimidinediamine for use as protein kinase
ΤI
      inhibitors
IN
      Michellys, Pierre-Yves; Pei, Wei; Marsilje, Thomas H.; Lu, Wenshuo; Chen,
      Bei; Uno, Tetsuo; Jin, Yunho; Jiang, Tao
      IRM LLC, Bermuda
PA
      PCT Int. Appl., 199pp.
SO
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DT
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LA
      English
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                                        20061208
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                               Ρ
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                              W
      WO 2007-US85304
                                        20071120
      CASREACT 149:79629; MARPAT 149:79629
OS
AΒ
      Title compds. I [R1 and R2 independently = halo, OR12, (un) substituted
      alkyl, alkynyl, etc.; or one of R1 or R2 = H; or R1 and R2 together form
      (un) substituted monocyclic or fused carbocyclic ring, aryl, heteroaryl,
      etc.; R3 = CN, SO2R12, (CR5)2CO2R12, etc.; R4 = H, NO2, halo,
      (un) substituted alkyl, alkenyl, etc.; R5 = H or alkyl; R6 = substituted
      aryl or heteroaryl; R12 = H, alkyl, aryl, etc.], and their
      pharmaceutically acceptable salts, are prepared and disclosed as protein
      kinase inhibitors. Thus, e.g., II was prepared by amidation of
      4-aminopiperidine-1-carboxylic acid tert-Bu ester with
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2-chloro-4-isopropoxy-5-nitrobenzoyl chloride (preparation given), followed by coupling with vinylboronic acid di-Bu ester, cyclization, reduction, substitution with (2,5-dichloropyrimidin-4-yl)-[2-(propane-2-sulfonyl)phenyl]amine (preparation given), and deprotection. I were evaluated in BaF3-NPM-ALK cell assays and, in general, demonstrated IC50 values from 1 nM to 10  $\mu\text{M}.$ 

IT 1032900-25-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of N,N'-diarylpyrimidinediamine for use as protein kinase inhibitors)

RN 1032900-25-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-(4-piperidinyl)phenyl]- (CA INDEX NAME)

IT	1032900-21-2P 1032900-27-8P 1032900-39-2P 1032900-54-1P 1032900-60-9P 1032900-64-3P 1032900-68-7P 1032900-71-2P 1032900-81-4P 1032900-94-9P 1032900-97-2P 1032901-00-0P 1032901-07-7P 1032901-20-4P 1032901-26-0P 1032901-49-7P 1032901-52-2P 1032901-77-1P 1032901-77-1P 1032901-77-1P 1032901-81-7P 1032901-81-7P 1032903-25-5P	1032900-23-4P 1032900-34-7P 1032900-51-8P 1032900-55-2P 1032900-62-1P 1032900-65-4P 1032900-69-8P 1032900-79-0P 1032900-95-0P 1032900-98-3P 1032901-02-2P 1032901-05-5P 1032901-05-5P 1032901-30-6P 1032901-50-0P 1032901-50-0P 1032901-65-7P 1032901-65-7P 1032901-71-5P 1032901-74-8P 1032901-74-8P 1032901-78-2P 1032901-82-8P 1032901-82-8P 1032903-20-0P	1032900-26-7P 1032900-38-1P 1032900-52-9P 1032900-56-3P 1032900-63-2P 1032900-66-5P 1032900-80-3P 1032900-80-3P 1032900-80-3P 1032900-84-7P 1032900-96-1P 1032900-99-4P 1032901-03-3P 1032901-06-6P 1032901-24-8P 1032901-48-6P 1032901-51-1P 1032901-66-8P 1032901-72-6P 1032901-75-9P 1032901-79-3P 1032903-18-6P 1032903-24-4P
			1032903-24-4P 1032903-27-7P 1032903-30-2P
	1032903-33-5P	1032903-34-6P	1032903-35-7P

 1032903-38-0P
 1032903-40-4P
 1032903-42-6P

 1032903-43-7P
 1032903-44-8P
 1032903-45-9P

1032903-47-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N,N'-diarylpyrimidinediamine for use as protein kinase inhibitors)

RN 1032900-21-2 CAPLUS

CN Ethanone, 1-[5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-4-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 1032900-23-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-(4-morpholinylmethyl)phenyl]- (CA INDEX NAME)

RN 1032900-26-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-(1-methyl-4-piperidinyl)phenyl]- (CA INDEX NAME)

RN 1032900-27-8 CAPLUS

CN 1-Piperidineethanol, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 1032900-34-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[4-(dimethylamino)cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

RN 1032900-38-1 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-[(1R,2S,4R)-2,4-bis(dimethylamino)cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032900-39-2 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-[(1R,2S,4S)-2,4-bis(dimethylamino)cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032900-51-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-(2S)-2-piperidinylphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032900-52-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-

[5-methyl-2-(1-methylethoxy)-4-(2R)-2-piperidinylphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032900-54-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-[4-(4-methyl-1piperazinyl)cyclohexyl]phenyl]- (CA INDEX NAME)

RN 1032900-55-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[4-[[2-(dimethylamino)ethyl]amino]cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032900-56-3 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-[4-(4-methyl-1-piperazinyl)-1-cyclohexen-1-yl]- (CA INDEX NAME)

RN 1032900-57-4 CAPLUS

CN 2-Piperazinone, 4-[4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]cyclohexyl]- (CA INDEX NAME)

RN 1032900-58-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-4-[4-(methylamino)cyclohexyl]-2-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 1032900-59-6 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-[2-(4-methyl-1-piperazinyl)ethyl]- (CA INDEX NAME)

RN 1032900-60-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-[4-(1-pyrrolidinyl)cyclohexyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



RN 1032900-62-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[4-[(2-methoxyethy1)methylamino]cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032900-63-2 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-[3-(4-methyl-1-piperazinyl)propyl]- (CA INDEX NAME)

RN 1032900-64-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[cis-4-(dimethylamino)cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

Relative stereochemistry.

RN 1032900-65-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-(2-piperidinyl)phenyl]- (CA INDEX NAME)

RN 1032900-66-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[4-methyl-2-(1-methylethoxy)-5-(4-piperidinyl)phenyl]- (CA INDEX NAME)

RN 1032900-68-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-methyl-2-(1-methylethoxy)-5-(4-piperidinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 1032900-69-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[trans-4-(dimethylamino)cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

Relative stereochemistry.

RN 1032900-70-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032900-71-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-[trans-4-(4-methyl-1piperazinyl)cyclohexyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032900-79-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-4-[cis-4-(methylamino)cyclohexyl]-2-(1-methylethoxy)phenyl]-(CA INDEX NAME)

Relative stereochemistry.

RN 1032900-80-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-4-[trans-4-(methylamino)cyclohexyl]-2-(1-methylethoxy)phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032900-81-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[4-methyl-2-(1-methylethoxy)-5-(3-methyl-5-isoxazolyl)phenyl]- (CA INDEX NAME)

RN 1032900-83-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[4-methyl-2-(1-methylethoxy)-5-(5-methyl-1H-pyrazol-3-yl)phenyl]- (CA INDEX NAME)

RN 1032900-84-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [4-methyl-2-(1-methylethoxy)-5-(1H-pyrazol-3-yl)phenyl]- (CA INDEX NAME)

RN 1032900-94-9 CAPLUS

CN 3-Isoxazolecarboxamide, 5-[5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-4-(1-methylethoxy)phenyl]-N-[2-(4-morpholinyl)ethyl]- (CA INDEX NAME)

RN 1032900-95-0 CAPLUS

CN Methanone, [5-[5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-4-(1-methylethoxy)phenyl]-3-isoxazolyl](4-ethyl-1-piperazinyl)- (CA INDEX NAME)

RN 1032900-96-1 CAPLUS

CN 3-Isoxazolecarboxamide, 5-[5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-4-(1-methylethoxy)phenyl]-N-methoxy- (CA INDEX NAME)

RN 1032900-97-2 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-(1H-benzimidazol-2-yl)-5-methyl-2-(1-methylethoxy)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032900-98-3 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-(1-pyrrolidinylmethyl)-(CA INDEX NAME)

RN 1032900-99-4 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-(4-piperidinyl)- (CA INDEX NAME)

RN 1032901-00-0 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-(4-morpholinylmethyl)-(CA INDEX NAME)

RN 1032901-02-2 CAPLUS

CN Benzoic acid, 4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)- (CA INDEX NAME)

RN 1032901-03-3 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl](4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 1032901-04-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2[5-methyl-4-(1'-methyl[1,4'-bipiperidin]-4-yl)-2-(1-methylethoxy)phenyl](CA INDEX NAME)

RN 1032901-05-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-[6-(4-methyl-1-piperazinyl)-3- pyridinyl]phenyl]- (CA INDEX NAME)

RN 1032901-06-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(cyclobutyloxy)-5-methyl-4-(4-piperidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032901-07-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[1-(2-methoxyethyl)-4-piperidinyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

RN 1032901-09-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[5-methyl-2-(1-methylethoxy)-4-(1-methyl-4-piperidinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 1032901-14-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[5-methyl-2-(1-methylethoxy)-4-(1-methyl-4-piperidinyl)phenyl]amino]-4-pyrimidinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

RN 1032901-20-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(5-methoxy-2-methyl[1,1'-biphenyl]-4-yl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032901-23-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(5-methoxy-2,4'-dimethyl[1,1'-biphenyl]-4-yl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032901-24-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(4'-fluoro-5-methoxy-2-methyl[1,1'-biphenyl]-4-yl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032901-26-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(2',4'-difluoro-5-methoxy-2-methyl[1,1'-biphenyl]-4-yl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032901-30-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[5-methyl-2-(1-methylethoxy)-4-[cis-4-(1-pyrrolidinyl)cyclohexyl]phenyl]-(CA INDEX NAME)

Relative stereochemistry.

RN 1032901-48-6 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N,2-dimethyl-4-(1-methylethoxy)- (CA INDEX NAME)

RN 1032901-49-7 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-(5-methyl-1H-pyrazol-3-yl)- (CA INDEX NAME)

RN 1032901-50-0 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-(2-methyl-5-thiazolyl)-(CA INDEX NAME)

RN 1032901-51-1 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-4-(1-methylethoxy)-N-(1-methyl-4-piperidinyl)-(CA INDEX NAME)

RN 1032901-52-2 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-cyclopropyl-N-methyl-4-(1-methylethoxy)- (CA INDEX NAME)

RN 1032901-65-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-[trans-4-(1-pyrrolidinyl)cyclohexyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032901-66-8 CAPLUS

CN Ethanol, 2-[[trans-4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]cyclohexyl]methylamino]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032901-67-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[cis-4-[(2-methoxyethyl)methylamino]cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032901-68-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[trans-4-[(2-methoxyethyl)methylamino]cyclohexyl]-5-methyl-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032901-69-1 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-[(4R)-4-(4-methyl-1-piperazinyl)-1-cyclohexen-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032901-70-4 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-[(4S)-4-(4-methyl-1-piperazinyl)-1-cyclohexen-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032901-71-5 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-[4-[[(1R)-2-hydroxy-1-methylethyl]amino]-1-cyclohexen-1-yl]-N-methyl-4-(1-methylethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032901-72-6 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-[4-[[(1S)-2-hydroxy-1-methylethyl]amino]-1-cyclohexen-1-yl]-N-methyl-4-(1-methylethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1032901-73-7 CAPLUS

CN Benzamide, 5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-4-(1-methylethoxy)-2-(4-oxo-1-cyclohexen-1-yl)-(CA INDEX NAME)

RN 1032901-74-8 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, 4-[[5-chloro-4-[[2-[(1-

methylethyl) sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl-5-(1-methylethoxy)-3'-(4-morpholinylmethyl)- (CA INDEX NAME)

RN 1032901-75-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [5-methyl-2-(1-methylethoxy)-4-(3-piperidinyl)phenyl]- (CA INDEX NAME)

RN 1032901-77-1 CAPLUS

CN Ethanol, 2-[[2-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-methylethoxy)phenyl]propyl]methylamino]-(CA INDEX NAME)

RN 1032901-78-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[trans-4-(dimethylamino)cyclohexyl]-2-methoxy-5-methylphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032901-79-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[cis-4-(dimethylamino)cyclohexyl]-2-methoxy-5-methylphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Relative stereochemistry.

RN 1032901-81-7 CAPLUS

CN Benzamide, 2-chloro-5-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-[2-(dimethylamino)ethyl]-4-(1-methylethoxy)- (CA INDEX NAME)

RN 1032901-82-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-chloro-2-(1-methylethoxy)-5-(3-methyl-5-isoxazolyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-18-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-(1-methyl-2-piperidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-19-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[1-methyl-2-(4-methyl-1-piperazinyl)ethyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-20-0 CAPLUS

CN Benzenepropanol,  $4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-<math>\gamma$ -methyl-3-(1-methylethoxy)- (CA INDEX NAME)

RN 1032903-24-4 CAPLUS

CN Benzeneethanol, 4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]- $\beta$ ,  $\beta$ -dimethyl-3-(1-methylethoxy)- (CA INDEX NAME)

RN 1032903-25-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[1,1-dimethyl-2-(4-methyl-1-piperazinyl)ethyl]-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-26-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[1-methyl-2-(1-pyrrolidinyl)ethyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-27-7 CAPLUS

CN Benzeneacetic acid, 4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]- $\alpha$ ,  $\alpha$ -dimethyl-3-(1-methylethoxy)-, methyl ester (CA INDEX NAME)

RN 1032903-28-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[1-methyl-2-(4-morpholinyl)ethyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-29-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[5-fluoro-2-[(1-methylethyl)sulfonyl]phenyl]-N2-[2-(1-methylethoxy)-4-(4-piperidinyl)phenyl]- (CA INDEX NAME)

RN 1032903-30-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[5-fluoro-2-[(1-methylethyl)sulfonyl]phenyl]-N2-[2-(1-methylethoxy)-4-(1-methyl-4-piperidinyl)phenyl]- (CA INDEX NAME)

RN 1032903-33-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-(4-piperidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-34-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-(1'-methyl[1,4'-bipiperidin]-4-yl)-2- (1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-35-7 CAPLUS

CN Cyclohexanone, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 1032903-38-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-(1-methyl-4-piperidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-40-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-(1-methylethoxy)-4-(1-methyl-4-piperidinyl)phenyl]amino]-4-pyrimidinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

RN 1032903-42-6 CAPLUS

CN 1-Piperidineacetamide, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 1032903-43-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-(1-methylethoxy)-2-(4-piperidinyl)-5-pyrimidinyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-44-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-6-(4-piperidinyl)-3-pyridinyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-45-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-6-[4-(1-piperazinyl)phenyl]-3-pyridinyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 1032903-47-1 CAPLUS

CN 1,3-Propanediol, 2-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1-methylethoxy)phenyl]-2-methyl- (CA INDEX NAME)

IT 1032903-60-8P 1032903-64-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N,N'-diarylpyrimidinediamine for use as protein kinase inhibitors)

RN 1032903-60-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[4-methyl-5-(2-methyl-1,3-dioxolan-2-yl)-2-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 1032903-64-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-methyl-5-(1-

methylethoxy)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L9 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2008:605237 CAPLUS

DN 149:44292

TI Development and Experimental Validation of a Docking Strategy for the Generation of Kinase-Targeted Libraries

AU Gozalbes, Rafael; Simon, Laurence; Froloff, Nicolas; Sartori, Eric; Monteils, Claude; Baudelle, Romuald

CS Cerep, Courtaboeuf, 91951, Fr.

SO Journal of Medicinal Chemistry (2008), 51(11), 3124-3132 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 149:44292

AB A high-throughput docking strategy for the filtering of in silico compds. and the generation of kinase-targeted libraries is described. Systematic docking and scoring in three kinase crystal 3D structures of 123 structurally diverse kinase ligands led to the determination of six thresholds

each kinase. These thresholds were used as filters for the virtual screening of two collections of compds.: a collection of more than 2500 drugs and drug-like compds. (neg. control) and a kinase-targeted library of 1440 compds. This strategy was then exptl. validated by testing 60 compds. from the kinase-targeted library on 41 kinases from five different families. The 60 compds. were split into those passing all the thresholds and the others (30 compds. in each group). The overall hit enrichment was 6.70-fold higher in the first group, validating our approach for the generation of kinase-targeted libraries and the identification of scaffolds with high kinase inhibitory potential.

IT 1032182-71-0 1032183-86-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(development and validation of docking strategy for generation of kinase-targeted libraries)

RN 1032182-71-0 CAPLUS

CN Benzamide, N-[2-[4-(dimethylamino)phenyl]ethyl]-4-[[2-[(3-methylphenyl)amino]-4-pyrimidinyl]amino]- (CA INDEX NAME)

RN 1032183-86-0 CAPLUS

CN Benzamide, N-methyl-3-[[2-[(3-methylphenyl)amino]-4-pyrimidinyl]amino]-N- [2-(2-pyridinyl)ethyl]- (CA INDEX NAME)

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 34 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2008:530636 CAPLUS
- DN 149:118868
- TI Genomic Alterations of Anaplastic Lymphoma Kinase May Sensitize Tumors to Anaplastic Lymphoma Kinase Inhibitors
- AU McDermott, Ultan; Iafrate, A. John; Gray, Nathanael S.; Shioda, Toshi; Classon, Marie; Maheswaran, Shyamala; Zhou, Wenjun; Choi, Hwan Geun; Smith, Shannon L.; Dowell, Lori; Ulkus, Lindsey E.; Kuhlmann, Georgiana; Greninger, Patricia; Christensen, James G.; Haber, Daniel A.; Settleman, Jeffrey
- CS Center for Molecular Therapeutics, Massachusetts General Hospital Cancer Center and Harvard Medical School, Charlestown, MA, 02129, USA
- SO Cancer Research (2008), 68(9), 3389-3395 CODEN: CNREA8; \(\sum\_{SN}\): 0008-5472
- PB American Association for Cancer Research
- DT Journal
- LA English
- AΒ Selective kinase inhibitors have had a substantial impact on the field of medical oncol. Whereas these agents can elicit dramatic clin. responses in some settings, their activity is generally limited to a subset of treated patients whose tumor cells harbor a specific genetic lesion. have established an automated platform for examining the sensitivity to various molecularly targeted inhibitors across a large panel of human tumor-derived cell lines to identify addnl. genotype-correlated responses that may be clin. relevant. Among the inhibitors tested in a panel of 602 cell lines derived from a variety of human cancers, we found that a selective inhibitor of the anaplastic lymphoma kinase (ALK) potently suppressed growth of a small subset of tumor cells. This subset included lines derived from anaplastic large cell lymphomas, non-small-cell lung cancers, and neuroblastomas. ALK is a receptor tyrosine kinase that was first identified as part of a protein fusion derived from a chromosomal translocation detected in the majority of anaplastic large cell lymphoma patients, and has recently been implicated as an oncogene in a small fraction of non-small-cell lung cancers and neuroblastomas. Significantly, sensitivity in these cell lines was well correlated with specific ALK genomic rearrangements, including chromosomal translocations and gene amplification. Moreover, in such cell lines, ALK kinase inhibition can lead to potent suppression of downstream survival signaling and an apoptotic response. These findings suggest that a subset of lung cancers, lymphomas, and neuroblastomas that harbor genomic ALK alterations may be clin. responsive to pharmacol. ALK inhibition. [Cancer Res 2008;68(9):3389-95].
- IT 761439-42-3, NVP-TAE 684
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (genomic alterations of anaplastic lymphoma kinase may sensitize tumors to anaplastic lymphoma kinase inhibitors)
- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

OSC.G 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (37 CITINGS)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 35 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2008:529900 CAPLUS
ΑN
     148:538288
DN
     Preparation of fused bicyclic derivatives of 2,4-diaminopyrimidine as ALK
ΤI
     and c-Met kinase inhibitors
IN
     Ahmed, Gulzar; Bohnstedt, Adolph; Breslin, Henry Joseph; Burke, Jason;
     Curry, Matthew A.; Diebold, James L.; Dorsey, Bruce; Dugan, Benjamin J.;
     Feng, Daming; Gingrich, Diane E.; Guo, Tao; Ho, Koc-Kan; Learn, Keith S.;
     Lisko, Joseph G.; Liu, Rong-Qiang; Mesaros, Eugen F.; Milkiewicz, Karen;
     Ott, Gregory R.; Parrish, Jonathan; Theroff, Jay P.; Thieu, Tho V.;
     Tripathy, Rabindranath; Underiner, Theodore L.; Wagner, Jason C.;
     Weinberg, Linda; Wells, Gregory J.; You, Ming; Zificsak, Craig A.
     Cephalon, Inc., USA; Pharmacopeia Drug Discovery, Inc.
PA
     PCT Int. Appl., 1297 pp.
SO
     CODEN: PIXXD2
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     Patent
     English
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     PATENT NO.
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                                             ) WO 2007-US22496
     WO 2008051547
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         TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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     AU 2007309427
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     JP 2010507665
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     US 20090221555
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                                               US 2009-162851
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     MX 2009004426
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                                               MX 2009-4426
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                                  20090916
     CN 101535276
                                               CN 2007-80039464
                           Α
                                                                        20090423
PRAI US 2006-853562P
                                  20061023
                           Р
     WO 2007-US22496
                                  20071023
                           W
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     MARPAT 148:538288
OS
     Title compds. I and II [R1 = H, halo, NO2, OH and derivs., aryl, alkyl,
AΒ
     etc.; R2 = (un) substituted alk(en/yn)yl, (hetero)aryl, R3-R5 =
     independently H, CO2H and derivs., NH2 and derivs., OCHF2, etc.; A1-A5 =
     independently (CH2)1-2 and derivs., CO, NH and derivs., S, SO, SO2, O,
     with provisos; with the exception of specified compds.; and their
     pharmaceutically acceptable salts] were prepared as ALK and c-Met kinase
     inhibitors for treating proliferative disorders. Thus, nitration of
     1,3,4,5-tetrahydrobenzo[b]azepin-2-one with HNO3/H2SO4, alkylation with Me
     iodide, reduction of the nitro intermediate and amination of
     2-[(2,5-dichloropyrimidin-4-yl)amino]-N-methylbenzamide gave
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benzazepinylaminopyrimidine III. III inhibited ALK and C-Met kinases with IC50 < 0.1  $\mu\text{M}\text{.}$ 

IT 1022965-78-1P, 2-[[2-[[3-(3-Amino-3-oxopropyl)-4-(prop-1-en-2yl)phenyl]amino]-5-chloropyrimidin-4-yl]amino]-3-fluoro-N-methylbenzamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate; preparation of fused bicyclic derivs. of 2,4-diaminopyrimidine as ALK and c-Met kinase inhibitors)

RN 1022965-78-1 CAPLUS

CN Benzenepropanamide, 5-[[5-chloro-4-[[2-fluoro-6-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-2-(1-methylethenyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2 \\ \text{O} \\ \text{C} \\ \text{Me} \\ \text{H}_2 \text{N} - \text{C} - \text{CH}_2 - \text{CH}_2 \\ \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{C}_1 \\ \text{F} \\ \end{array}$$

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2008:474245 CAPLUS
- DN 148:447347
- TI An oncogene arising from a fusion of the EML4 and ALK genes of human and its use in the diagnosis and treatment of cancers
- IN Mano, Hiroyuki; Kuromitsu, Sadao; Shindo, Nobuaki; Soga, Takatoshi; Furutani, Takashi
- PA Astellas Pharma Inc., Japan; Curegene K.K.
- SO Can. Pat. Appl., 156pp. CODEN: CPXXEB
- DT Patent
- LA English
- FAN.CNT 1

	PAT	TENT NO.				KIND		DATE			APPLICATION NO.						DATE		
PI	US	2598893 20080090776 7728120 1914240 1914240			A1 20080411 A1 20080417 B2 20100601 A1 20080423 B1 20091202				CA 2007-2598893 US 2007-845498										
	ΕP							04,243	14,24 EP 20(			007-254044				20071011			
	ĿГ	-	AT,			CH,	CY,	CZ, LV,	DE,										
		EP 2116553			·	A					JP 2007-265917				20071011				
								EP 2009-6058 DK, EE, ES, FI, FR, GB,											
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	MT,	NI	,	PL,	PT,	RO,	SE,	SI,	SK,	TR
	ES	450547 2335368			Т3		20100325			AT 2007-254044 ES 2007-254044					20071011				
	US	20090099193 7605131			В2		20091020			US 2008-100595									
PRAI	JР	2009 2006	-277	718		А		2009 2006	1011		JP	20	109	3591	8		2	0090	218
	CA	2007	-259	8893		А		2007	0824										
		2007 2007				A3 A		2007 2007											

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A chimeric gene arising from a fusion of the EML4 and ALK genes as a result of an inversion on human chromosome 2 is identified in a number of cancers. Detection of the oncogene, or its gene product, may be useful in the diagnosis of cancers, and the gene product may be a target for drug therapy. The fusion gene mRNA was identified in a lung adenocarcinoma patient and was found in tissue from non-small cell lung cancer patients. The fusion protein is active as a kinase, retaining the kinase activity of the ALK anaplastic lymphoma kinase gene product. Inhibitors of the kinase activity were effective at inhibiting growth of cells expressing the oncogene. SiRNAs directed against the mRNA of the chimeric gene were also effective at inhibiting cell proliferation.

IT 761439-42-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (as kinase inhibitor of EML4-ALK fusion protein; oncogene arising from fusion of EML4 and ALK genes of human and its use in diagnosis and treatment of cancers)

- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-

piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl] (CA INDEX NAME)

- L9 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2008:161408 CAPLUS
- DN 149:143328
- TI TAE226 Inhibits Human Neuroblastoma Cell Survival
- AU Beierle, Elizabeth A.; Trujillo, Angelica; Nagaram, Abhilasha; Golubovskaya, Vita M.; Cance, William G.; Kurenova, Elena V.
- CS Department of Surgery, College of Medicine, University of Florida, Gainesville, FL, USA
- SO Cancer Investigation (2008), 26(2), 145-151 CODEN: CINVD7; ISSN: 0735-7907
- PB Informa Healthcare
- DT Journal
- LA English
- AB Purpose. Neuroblastoma is one of the most devastating pediatric solid tumors and is unresponsive to many interventions. TAE226 is a novel small mol. FAK inhibitor. We investigated the effects of TAE226 on neuroblastoma cells in vitro. Materials and Methods. Human neuroblastoma cell lines were treated with varying concns. of TAE226. Following treatment, cell viability, cell cycle, and apoptosis were evaluated. Results. Treatment of human neuroblastoma cell lines with TAE226 resulted in a concentration dependent decrease in FAK phosphorylation, decrease in cellular viability, cell cycle arrest, and an increase in apoptosis. Conclusions. Targeting FAK provides potential therapeutic options for the treatment of neuroblastoma and deserves further investigation.
- IT 761437-28-9
  - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (TAE226 decreased focal adhesion kinase Y397 phosphorylation, viability, resulted cell cycle arrest and increased apoptosis in human neuroblastoma cell)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 38 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2008:21101 CAPLUS

DN 148:276277

TI Identification of genotype-correlated sensitivity to selective kinase inhibitors by using high-throughput tumor cell line profiling

AU Mcdermott, Ultan; Sharma, Sreenath V.; Dowell, Lori; Greninger, Patricia; Montagut, Clara; Lamb, Jennifer; Archibald, Heidi; Raudales, Raul; Tam, Angela; Lee, Diana; Rothenberg, S. Michael; Supko, Jeffrey G.; Sordella, Raffaella; Ulkus, Lindsey E.; Lafrate, A. John; Maheswaran, Shyamala; Njauw, Ching Ni; Tsao, Hensin; Drew, Lisa; Hanke, Jeff H.; Ma, Xiao-Jun; Erlander, Mark G.; Gray, Nathanael S.; Haber, Daniel A.; Settleman, Jeffrey

CS Center for Molecular Therapeutics, Massachusetts General Hospital Cancer Center and Harvard Medical School, Charlestown, MA, 02129, USA

SO Proceedings of the National Academy of Sciences of the United States of America (2007), 104(50), 19936-19941 CODEN: PNASA6; ISSN: 0027-8424

PB National Academy of Sciences

DT Journal

LA English

AΒ Kinase inhibitors constitute an important new class of cancer drugs, whose selective efficacy is largely determined by underlying tumor cell genetics. The authors established a high-throughput platform to profile 500 cell lines derived from diverse epithelial cancers for sensitivity to 14 kinase inhibitors. Most inhibitors were ineffective against unselected cell lines but exhibited dramatic cell killing of small non-overlapping subsets. Cells with exquisite sensitivity to EGFR, HER2, MET, or BRAF kinase inhibitors were marked by activating mutations or amplification of the drug target. Although most cell lines recapitulated known tumor-associated genotypes, the screen revealed low-frequency drug-sensitizing genotypes in tumor types not previously associated with drug susceptibility. Furthermore, comparing drugs thought to target the same kinase revealed striking differences, predictive of clin. efficacy. Genetically defined cancer subsets, irresp. of tissue type, predict response to kinase inhibitors, and provide an important preclin. model to quide early clin. applications of novel targeted inhibitors.

IT 761439-42-3, NVP-TAE684

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(identification of genotype-correlated sensitivity to selective kinase inhibitors by using high-throughput tumor cell line profiling)

RN 761439-42-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

OSC.G	55	THERE ARE 55 CAPLUS RECORDS THAT CITE THIS RECORD (55 CITINGS)
RE.CNT	21	THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
		ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 39 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:1306239 CAPLUS
- DN 148:623
- TI Therapeutic Efficacy of a Novel Focal Adhesion Kinase Inhibitor TAE226 in Ovarian Carcinoma
- AU Halder, Jyotsnabaran; Lin, Yvonne G.; Merritt, William M.; Spannuth, Whitney A.; Nick, Alpa M.; Honda, Toshiyuki; Kamat, Aparna A.; Han, Liz Y.; Kim, Tae Jin; Lu, Chunhua; Tari, Ana M.; Bornmann, William; Fernandez, Ariel; Lopez-Berestein, Gabriel; Sood, Anil K.
- CS Department of Gynecologic Oncology, The University of Texas M. D. Anderson Cancer Center, Houston, TX, USA
- Cancer Center, Houston, TX, USA
  SO Cancer Research (2007), 67(22), 10976-10983
  CODEN: CNREA8; ISSN: 0008-5472
- PB American Association for Cancer Research
- DT Journal
- LA English
- AΒ Focal adhesion kinase (FAK) overexpression is frequently found in ovarian and other cancers and is predictive of poor clin. outcome. In the current study, we characterized the biol. and therapeutic effects of a novel FAK inhibitor, TAE226. Taxane-sensitive (SKOV3i.p.1 and HeyA8) and taxane-resistant (HeyA8-MDR) cell lines were used for in vitro and in vivo therapy expts. using TAE226 alone and in combination with docetaxel. Assessment of cytotoxicity, cell proliferation [proliferating cell nuclear antigen (PCNA)], angiogenesis (CD31), and apoptosis (terminal nucleotidyl transferase-mediated nick end labeling) were done by immunohistochem. and immunofluorescence. In vitro, TAE226 inhibited the phosphorylation of FAK at both Y397 and Y861 sites, inhibited cell growth in a time- and dose-dependent manner, and enhanced docetaxel-mediated growth inhibition by 10- and 20-fold in the taxane-sensitive and taxane-resistant cell lines, resp. In vivo, FAK inhibition by TAE226 significantly reduced tumor burden in the HeyA8, SKOV3i.p.1, and HeyA8-MDR models (46-64%) compared with vehicle-treated controls. However, the greatest efficacy was observed with concomitant administration of TAE226 and docetaxel in all three models (85-97% reduction, all P values <0.01). In addition, TAE226 alone and in combination with chemotherapy significantly prolonged survival in tumor-bearing mice. Even in larger tumors, combination therapy with TAE226 and docetaxel resulted in tumor regression. The therapeutic efficacy was related to reduced pericyte coverage, induction of apoptosis of tumor-associated endothelial cells, and reduced microvessel d. and tumor cell proliferation. The novel FAK inhibitor, TAE226, offers an attractive therapeutic approach in ovarian carcinoma.
- IT 761437-28-9
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antitumor efficacy of a novel focal adhesion kinase inhibitor TAE226 in ovarian carcinoma)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)
RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:746527 CAPLUS
- DN 147:202997
- TI N-4-Pyrimidinyl-1H-indazol-4-amine inhibitors of Lck: Indazoles as phenol isosteres with improved pharmacokinetics
- AU Bamborough, Paul; Angell, Richard M.; Bhamra, Inder; Brown, David; Bull, James; Christopher, John A.; Cooper, Anthony W. J.; Fazal, Lynsey H.; Giordano, Ilaria; Hind, Lucy; Patel, Vipulkumar K.; Ranshaw, Lisa E.; Sims, Martin J.; Skone, Philip A.; Smith, Kathryn J.; Vickerstaff, Emma; Washington, Melanie
- CS Medicines Research Centre, GlaxoSmithKline R&D, Hertfordshire, SG1 2NY, UK
- SO Bioorganic & Medicinal Chemistry Letters (2007), 17(15), 4363-4368 CODEN: BMCLE8; ISSN: 0960-894X
- PB Elsevier Ltd.
- DT Journal
- LA English
- OS CASREACT 147:202997
- 2,4-Dianilino pyrimidines are well-known inhibitors of tyrosine kinases including lymphocyte specific kinase (Lck). Structure-activity relationships at the 4-position are discussed and rationalized. Examples bearing a 2-methyl-5-hydroxyaniline substituent at the 4-position were especially potent but showed poor oral pharmacokinetics. Replacement of this substituent by 4-amino(5-methyl-1H-indazole) yielded compds. with comparable enzyme potency and improved pharmacokinetic properties.
- IT 944795-19-1P
  - RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
    - (pyrimidinylindazolamine inhibitors of Lck as phenol isosteres with improved pharmacokinetics)
- RN 944795-19-1 CAPLUS
- CN Benzamide, 3-[[2-[[3-(aminocarbonyl)phenyl]amino]-4-pyrimidinyl]amino]-N,N,4-trimethyl- (CA INDEX NAME)

- OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)
- RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD

L9 ANSWER 41 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2007:667606 CAPLUS

DN 147:63669

TI A novel low-molecular weight inhibitor of focal adhesion kinase, TAE226, inhibits glioma growth

AU Shi, Qing; Hjelmeland, Anita B.; Keir, Stephen T.; Song, Linhua; Wickman, Sarah; Jackson, Dowdy; Ohmori, Osamu; Bigner, Darell D.; Friedman, Henry S.; Rich, Jeremy N.

CS Department of Surgery, Duke University Medical Center, Durham, NC, USA

SO Molecular Carcinogenes(s (2007), 46(6), 488-496 CODEN: MOCAE8; ISSN: 0899-1987

PB Wiley-Liss, Inc.

DT Journal

LA English

Glioblastomas are highly lethal cancers that resist current therapies. AΒ Novel therapies under development target mol. mechanisms that promote glioblastoma growth. In glioblastoma patient specimens, the non-receptor tyrosine kinase focal adhesion kinase (FAK) is overexpressed. Upon growth factor receptor stimulation or integrin engagement, FAK is activated by phosphorylation on critical tyrosine residues. Activated FAK initiates a signal transduction cascade which promotes glioma growth and invasion by increasing cellular adhesion, migration, invasion, and proliferation. find that human glioma cell lines express different levels of total FAK protein and activating phosphorylation of tyrosine residues Tyr397, Tyr861, and Tyr925. As all glioma cell lines examined expressed phosphorylated FAK, we examined the efficacy of a novel low-mol. weight inhibitor of FAK, TAE226, against human glioma cell lines. TAE226 inhibited the phosphorylation of FAK as well as the downstream effectors AKT, extracellular signal-related kinase, and S6 ribosomal protein in multiple glioma cell lines. TAE226 induced a concentration-dependent decrease

cellular proliferation with an associated G2 cell cycle arrest in every cell line and an increase in apoptosis in a cell-line-specific manner. TAE226 also decreased glioma cell adhesion, migration, and invasion through an artificial extracellular matrix. Together, these data demonstrate the potential benefit of TAE226 for glioma therapy.

IT 761437-28-9

in

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

RN 761437-28-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G	38	THERE ARE 38 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)
RE.CNT	19	THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
		ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:412514 CAPLUS
- DN 147:28253
- TI Inhibition of both focal adhesion kinase and insulin-like growth factor-I receptor kinase suppresses glioma proliferation in vitro and in vivo
- AU Liu, Ta-Jen; LaFortune, Tiffany; Honda, Toshiyuki; Ohmori, Osamu; Hatakeyama, Shinji; Meyer, Thomas; Jackson, Dowdy; de Groot, John; Yung, W. K. Alfred
- CS Brain Tumor Center, Department of Neuro-Oncology, The University of Texas M. D. Anderson Cancer Center, USA
- SO Molecular Cancer Therapeutics (2007) 6(4), 1357-1367 CODEN: MCTOCF; ISSN: 1535-7168
- PB American Association for Cancer Research
- DT Journal
- LA English
- AΒ Multiple genetic aberrations in human gliomas contribute to their highly infiltrative and rapid growth characteristics. Focal adhesion kinase (FAK) regulates tumor migration and invasion. Insulin-like growth factor-I receptor (IGF-IR), whose expression correlates with tumor grade, is involved in proliferation and survival. We hypothesized that inhibiting the phosphorylation of FAK and IGF-IR by NVP-TAE226 (hereafter called TAE226), a novel dual tyrosine kinase inhibitor of FAK and IGF-IR, would suppress the growth and invasion of glioma cells. In culture, TAE226 inhibited extracellular matrix-induced autophosphorylation of FAK (Tyr397). TAE226 also inhibited IGF-I-induced phosphorylation of IGF-IR and activity of its downstream target genes such as MAPK and Akt. TAE226 retarded tumor cell growth as assessed by a cell viability assay and attenuated G2-M cell cycle progression associated with a decrease in cyclin B1 and phosphorylated cdc2 (Tyr15) protein expression. TAE226 treatment inhibited tumor cell invasion by at least 50% compared with the control in an in vitro Matrigel invasion assay. Interestingly, TAE226 treatment of tumor cells containing wild-type p53 mainly exhibited G2-M arrest, whereas tumor cells bearing mutant p53 underwent apoptosis. Induction of apoptosis by TAE226 was substantiated by detection of caspase-3/7 activation and poly(ADP-ribose) polymerase cleavage and by an Annexin V apoptosis assay. More importantly, TAE226 treatment significantly increased the survival rate of animals in an intracranial glioma xenograft model. Collectively, these data show that blocking the signaling pathways of FAK and IGF-IR with TAE226 has the potential to be an efficacious treatment for human gliomas.
- IT 761437-28-9, NVP-TAE 226
  - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (inhibition of FAK and IGF-I receptor kinase-related mutated p53-regulated multiple pathways suppressed glioma proliferation by TAE226)
- RN 761437-28-9 CAPLUS
- CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 42 THERE ARE 42 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:203037 CAPLUS
- DN 146:434402
- TI Identification of NVP-TAE684, a potent, selective, and efficacious inhibitor of NPM-ALK. [Erratum to document cited in CA146:308635]
- AU Galkin, Anna V.; Melnick, Jonathan S.; Kim, Sungjoon; Hood, Tami L.; Li, Nanxin; Li, Lintong; Xia, Gang; Steensma, Ruo; Chopiuk, Greg; Jiang, Jiqing; Wan, Yongqin; Ding, Peter; Liu, Yi; Sun, Fangxian; Schultz, Peter G.; Gray, Nathanael S.; Warmuth, Markus
- CS Kinase Lead Discovery, Departments of Pharmacology and Medicinal Chemistry, Genomics Institute of the Novartis Research Foundation, San Diego, CA, 92121, USA
- SO Proceedings of the National Academy of Sciences of the United States of America (2007), 104(6), 2025 CODEN: PNASA6: ISSN: 0027-8424
- PB National Academy of Sciences
- DT Journal
- LA English
- AB The first two authors, Anna V. Galkin and Jonathan S. Melnick, contributed equally to the work.
- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

- L9 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:32903 CAPLUS
- DN 146:308635
- TI Identification of NVP-TAE684, a potent, selective, and efficacious inhibitor of NPM-ALK
- AU Galkin, Anna V.; Melnick, Jonathon S.; Kim, Sunjoon; Hood, Tami L.; Li, Nanxin; Li, Lintong; Xia, Gang; Steensma, Ruo; Chopiuk, Greg; Wan, Yongqin; Ding, Peter; Liu, Yi; Sun, Fangxian; Schultz, Peter G.; Gray, Nathanael S.; Warmuth, Markus
- CS Kinase Lead Discovery, Departments of Pharmacology and Medicinal Chemistry, Genomics Institute of the Novartis Research Foundation, San Diego, CA. 92121, USA
- SO Proceedings of the National Academy of Sciences of the United States of America (2007), 104(1), 270-275 CODEN: RNASA6; ISBN: 0027-8424
- PB National Academy of Sciences
- DT Journal
- LA English
- AB Constitutive overexpression and activation of NPM-ALK fusion protein [t(2:5)(p23;q35)] is a key oncogenic event that drives the survival and proliferation of anaplastic large cell lymphomas (ALCLs). We have identified a highly potent and selective small-mol. ALK inhibitor, NVP-TAE684, which blocked the growth of ALCL-derived and ALK-dependent cell lines with IC50 values between 2 and 10 nM. NVP-TAE684 treatment resulted in a rapid and sustained inhibition of phosphorylation of NPM-ALK and its downstream effectors and subsequent induction of apoptosis and cell cycle arrest. In vivo, NVP-TAE684 suppressed lymphomagenesis in two independent models of ALK-pos. ALCL and induced regression of established Karpas-299 lymphomas. NVP-TAE684 also induced down-regulation of CD30 expression, suggesting that CD30 may be used as a biomarker of therapeutic NPM-ALK kinase activity inhibition.
- IT 761439-42-3, NVP-TAE 684
  - RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (NVP-TAE684 as selective inhibitor of NPM-ALK protein in anaplastic large cell lymphomas)
- RN 761439-42-3 CAPLUS
- CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

- OSC.G 42 THERE ARE 42 CAPLUS RECORDS THAT CITE THIS RECORD (43 CITINGS)
- RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 45 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
ΑN
     2006:1256680 CAPLUS
     146:20278
DN
     2,4-Pyrimidinediamine compound JAK kinase inhibitors, and their
ΤI
     therapeutic use
ΙN
     Wong, Brian
PA
     Rigel Pharmaceuticals, Inc., USA
     U.S. Pat. Appl. Publ., 26pp.
SO
     CODEN: USXXCO
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                          KIND DATE
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                                                                        DATE
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     US 20060270694
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                                               US 2006-416652
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PΤ
     CA 2604551
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     WO 2007027238
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     WO 2007027238
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              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
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                                  20080206 EP 2006-824733
                                                                          20060502
     EP 1883302
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              BA, HR, MK, YU
                                   20081120
                                                JP 2008-510173
     JP 2008540436
                            Τ
                                                                          20060502
PRAI US 2005-678241P
                            Ρ
                                   20050503
                         W
     WO 2006-US17008
                                   20060502
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The invention provides 2,4-pyrimidinediamine compds. that selectively
     inhibit JAK kinase as compared to Syk kinase, as well as various methods
     of using the JAK-selective compds. for treating e.g. an immune-related
     disease.
ΤТ
     916044-26-3
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (pyrimidinediamine compound JAK kinase inhibitors, and therapeutic use)
RN
     916044-26-3 CAPLUS
     Glycine, N-[4-[5-fluoro-2-[(3-hydroxyphenyl)amino]-4-
CN
     pyrimidinyl]amino]benzoyl]-, methyl ester (CA INDEX NAME)
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OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

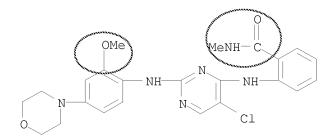
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ANSWER 46 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2006:513675 CAPLUS
ΑN
DN
      145:34151
      Combinations of JAK kinase inhibitors
TI
IN
      Cooke, Nigel Graham; Manley, Paul W.
PA
      Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SO
      PCT Int. Appl., 61 pp.
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
                            KIND DATE
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      WO 2006056399
      A2
      20060601

      WO 2006056399
      A3
      20060831

                                                   WO 2005-EP12480
                                                                               20051122
PΙ
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               KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
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          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
               GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
               KG, KZ, MD, RU, TJ, TM
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                                                 CA 2005-2586605
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      CN 101106983
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                                                    EP 2005-814596
      EP 1885352
                                                                                20051122
                              A2
           R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
               IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
      JP 2008520612 T 20080619 JP 2007-541823 20051122
BR 2005017887 A 20081021 BR 2005-17887
IN 2007DN03463 A 20070831 IN 2007-DN3463
US 20090156602 A1 20090618 US 2007-719838
MX 2007006204 A 20070620 MX 2007-6204
KR 2007085433 A 20070827 KR 2007-711743

PRAI US 2004-630713P P 20041124
WO 2005-EP12480 W 20051122
                                                                              20051122
                                                                              20070509
                                                                              20070521
                                                                               20070523
                                                   KR 2007-711743
                                                                                20070523
AΒ
      The invention provides a pharmaceutical combination comprising (a) at
      least one agent selected from Bcr-Abl, Flt-3, FAK and RAF kinase
      inhibitors; and (b) at least one JAK kinase inhibitor, and a method for
      treating or preventing a proliferative disease using such a combination.
      A preferred embodiment of the invention is the combination of a RAF
      inhibitor, e.g., (4-tert-butylphenyl)-(4-pyridin-4-yl-methyl-isoquinolin-1-
      yl)amine or [4,7']bi-isoquinolinyl-1-yl-4-(tert-butylphenyl)amine, and a
      JAK kinase inhibitor, such as PNU 156804 or WHI-P 131 for the treatment of
      myelomas, especially multiple myeloma.
ΙT
      761437-28-9
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
          (combinations of JAK kinase inhibitors with other protein kinase
          inhibitors for treatment or prevention of proliferative disease)
RN
      761437-28-9 CAPLUS
CN
      Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-
      pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)
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OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 47 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2006:193590 CAPLUS
ΑN
     144:274291
DN
     Preparation of bis(arylamino)pyrimidine derivatives as antitumor agents
ΤI
ΙN
     Imbach, Patricia; Kawahara, Eiji; Konishi, Kazuhide; Matsuura, Naoko;
     Miyake, Takahiro; Ohmori, Osamu; Roesel, Johannes; Teno, Naoki; Umemura,
     Ichiro
     Novartis AG, Switz.; Novartis Pharma GmbH
PA
     PCT Int. Appl., 118 pp.
SO
     CODEN: PIXXD2
DT
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LA
     English
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                                             APPLICATION NO.
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     WO 2006021454
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              CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
              GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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                                  20070516
                                              EP 2005-776772
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                                              AR 2005-103592
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                                             KR 2007-706800
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                                             NO 2007-1593
     NO 2007001593
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                          A1
     US 20090131436
                                                                       20090112
                                 20090521
PRAI GB 2004-19161
                          Α
                                  20040827
     WO 2005-EP9251 W
                                  20050826
     CASREACT 144:274291; MARPAT 144:274291
OS
     Title compds. I [R1 = H, (substituted) 5- or 6-membered heterocyclyl; R2 =
AΒ
     H; R3 = (substituted) sulfamoyl, carbamoyl, 5- or 6-membered heterocyclyl;
     R2R3 together with N to which they are attached form heterocyclyl; R5 =
     halo; R7 = H, alkoxy, carbamoyl, (substituted) 5- or 6-membered heterocyclyl; R8 = H, halo, alkoxy, carbamoyl, (substituted) 5- or
```

6-membered heterocyclyl; R7R8 together form a 6-membered heterocyclyl; R9 = H, (substituted) 5- or 6-membered heterocyclyl; R10 = H, alkoxy], or

salts thereof, were prepared For example, title compound II was prepared from

 $2\text{-}(2,5\text{-}dichloropyrimidin-}4\text{-}ylamino})\text{-}N\text{-}isobutylbenzenesulfonamide}$  and  $4\text{-}amino-}3\text{-}methoxy-}N\text{-}methylbenzamide}. I inhibited ALK (anaplastic lymphoma kinase) with IC50 = 0.01-1 <math display="inline">\mu\text{M}$ .

IT 878158-62-4P 878158-63-5P 878158-64-6P 878159-13-8P 878159-14-9P 878159-15-0P 878159-16-1P 878159-17-2P 878159-18-3P 878159-19-4P 878159-20-7P 878159-60-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of bis(arylamino)pyrimidine derivs. as kinase inhibitors and antitumor agents)

RN 878158-62-4 CAPLUS

CN

3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-3-methyl- (CA INDEX NAME)

RN 878158-63-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-3-methyl-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 878158-64-6 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-3-methyl-, (3R)- (CA INDEX NAME)

RN 878159-13-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 878159-14-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[5-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 878159-15-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-(4-morpholiny1)pheny1]amino]-4-pyrimidiny1]amino]-N-methy1-5-(4-methy1-1-piperaziny1)- (CA INDEX NAME)

RN 878159-16-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-5-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-N-methyl-(CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 878159-17-2 CAPLUS

CN Benzamide, 5-[1,4'-bipiperidin]-1'-yl-2-[[5-chloro-2-[[2-methoxy-5-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 878159-18-3 CAPLUS

CN Benzamide, 5-[1,4'-bipiperidin]-1'-yl-2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 878159-19-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-5-(4-hydroxy-1-piperidinyl)-N-methyl- (CA INDEX NAME)

RN 878159-20-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-5-(4-hydroxy-1-piperidinyl)-N-methyl- (CA INDEX NAME)

RN 878159-60-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-(4-ethyl-1-piperazinyl)-2-methoxyphenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 48 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2005:158647 CAPLUS
ΑN
     142:261547
DN
      Preparation of 2,4-pyrimidinediamines useful in the treatment of
ΤI
      neoplastic diseases, inflammatory and immune system disorders
IN
      Garcia-echeverria, Carlos; Kanazawa, Takanori; Kawahara, Eiji; Masuya,
      Keiichi; Matsuura, Naoko; Miyake, Takahiro; Ohmori, Osamu; Ūmemura,
      Ichiro; Steensma, Ruo; Chopiuk, Greg; Jiang, Jiqing; Wan, Yongqin; Ding,
      Qiang; Zhang, Qiong; Gray, Nathanael Schiander; Karanewsky, Donald
      Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.; IRM LLC
PA
SO
      PCT Int. Appl., 285 pp.
      CODEN: PIXXD2
                                                       Applicant's
DT
      Patent
      English
LA
FAN.CNT 2
      PATENT NO.
                            KIND
                                                  APPLICATION NO.
                                      DATE
                                                                               DATE
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      WO 2005016894
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      AU 2008229685
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PRAI GB 2003-19227
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      GB 2003-22370
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                                      20030924
      AU 2004-264382
                              А3
                                      20040813
      WO 2004-EP9099
                              W
                                      20040813
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
      CASREACT 142:261547; MARPAT 142:261547
      The title compds. I [R = aryl, heteroaryl, cycloalkyl and
AΒ
      heterocycloalkyl; R0-R3 = H, alkyl, cycloalkyl, etc.; R4 = H, alkyl; R5,
      R6 = H, alkyl, alkoxyalkyl, etc.], useful for the manufacture of a medicament
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for the treatment or prevention of a disease which responds to inhibition

of FAK and/or ALK and/or ZAP-70 and/or IGF-IR, were prepared and formulated.

E.g., a 2-step synthesis of II, starting from 2,4-dichloro-5-nitropyrimidine and 2-amino-N-methylbenzenesulfonamide, was given. The compds. I have IC50 values in the range of 10 nM to 2  $\mu$ M in cell-free ZAP-70 kinase assay. ΙT 761437-28-9P 761437-29-0P 761437-30-3P 761437-31-4P 761437-32-5P 761437-33-6P 761437-34-7P 761437-35-8P 761437-36-9P 761437-37-0P 761437-39-2P 761437-40-5P 761437-41-6P 761437-42-7P 761437-43-8P 761437-44-9P 761437-45-0P 761437-46-1P 761437-47-2P 761437-48-3P 761437-49-4P 761437-50-7P 761437-51-8P 761437-52-9P 761437-53-0P 761437-55-2P 761437-54-1P 761437-59-6P 761437-60-9P 761437-61-0P 761437-62-1P 761437-64-3P 761437-63-2P 761437-65-4P 761437-66-5P 761437-67-6P 761437-70-1P 761437-68-7P 761437-69-8P 761437-71-2P 761437-72-3P 761437-73-4P 761437-74-5P 761437-76-7P 761437-84-7P 761437-85-8P 761437-86-9P 761437-88-1P 761437-91-6P 761437-92-7P 761437-93-8P 761437-94-9P 761437-95-0P 761437-96-1P 761437-97-2P 761438-00-0P 761438-89-5P 761438-90-8P 761438-91-9P 761438-92-0P 761438-93-1P 761438-95-3P 761438-96-4P 761438-97-5P 761438-98-6P 761439-00-3P 761439-01-4P 761439-02-5P 761439-03-6P 761439-04-7P 761439-06-9P 761439-05-8P 761439-07-0P 761439-08-1P 761439-09-2P 761439-12-7P 761439-10-5P 761439-11-6P 761439-13-8P 761439-14-9P 761439-15-0P 761439-16-1P 761439-18-3P 761439-17-2P 761439-19-4P 761439-20-7P 761439-21-8P 761439-22-9P 761439-23-0P 761439-24-1P 761439-25-2P 761439-26-3P 761439-27-4P 761439-28-5P 761439-29-6P 761439-30-9P 761439-31-0P 761439-32-1P 761439-33-2P 761439-34-3P 761439-35-4P 761439-36-5P 761439-37-6P 761439-38-7P 761439-39-8P 761439-40-1P 761439-41-2P 761439-42-3P 761439-43-4P 761439-44-5P 761439-45-6P 761439-46-7P 761439-47-8P 761439-48-9P 761439-49-0P 761439-50-3P 761439-51-4P 761439-53-6P 761439-52-5P 761439-54-7P 761439-55-8P 761439-56-9P 761439-57-0P 761439-58-1P 761439-59-2P 761439-60-5P 761439-61-6P 761439-62-7P 761439-63-8P 761439-64-9P 761439-65-0P 761439-66-1P 761439-67-2P 761439-81-0P 761439-82-1P 761439-85-4P 761439-86-5P 761439-94-5P 761439-95-6P 845811-15-6P 845811-16-7P 845811-17-8P 845811-35-0P 845811-36-1P 845811-37-2P 845811-38-3P 845811-39-4P 845811-40-7P 845811-41-8P 845811-43-0P 845811-44-1P 845811-45-2P 845811-46-3P

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845811-54-3P

845811-47-4P

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2, 4-pyrimidinediamines useful in the treatment of neoplastic diseases, inflammatory and immune system disorders)

761437-28-9 CAPLUS

RN CN

Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-29-0 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-30-3 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761437-31-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-32-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[2-(4-morpholinyl)ethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-33-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-34-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-35-8 CAPLUS

CN Benzamide, 2-[[2-[[4-(4-acetyl-1-piperazinyl)-2-methoxyphenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

## 10/568,367 (RCE)

RN 761437-36-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-hydroxy-1-piperidinyl)-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-37-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(2-ethoxyethoxy)-1-piperidinyl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-39-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(2-methoxyethoxy)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-40-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-41-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[3-(methylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-42-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761437-43-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-44-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(9aR)-hexahydropyrazino[2,1-c][1,4]oxazin-8(1H)-yl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-45-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(9aS)-hexahydropyrazino[2,1-c][1,4]oxazin-8(1H)-yl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-46-1 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)- (CA INDEX NAME)

RN 761437-47-2 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-48-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-49-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-

piperidinyl)methoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-50-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[2-(4-methyl-1-piperazinyl)ethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-51-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-52-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-[3-(methylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-53-0 CAPLUS

CN Benzamide, 2-[[2-[(5-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-54-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

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RN 761437-55-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-59-6 CAPLUS

CN Benzamide, 2-[[2-[[5-(4-acetyl-1-piperazinyl)-2-methoxyphenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-60-9 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[[2-methoxy-5-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-61-0 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-62-1 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[(5-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-63-2 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-64-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-65-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-66-5 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-67-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

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RN 761437-68-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-69-8 CAPLUS

CN Benzamide, 2-[[2-[(5-[1,4'-bipiperidin]-1'-y1-2-methoxyphenyl)amino]-5-

chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-70-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N,6-dimethyl- (CA INDEX NAME)

RN 761437-71-2 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N,6-dimethyl- (CA INDEX NAME)

RN 761437-72-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N,6-dimethyl- (CA INDEX NAME)

RN 761437-73-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-5-fluoro-N-methyl- (CA INDEX NAME)

RN 761437-74-5 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-5-fluoro-N-methyl- (CA INDEX NAME)

RN 761437-76-7 CAPLUS

CN Benzamide, 2-[[2-[[4-(4-acetyl-1-piperazinyl)-2-methoxyphenyl]amino]-5-chloro-4-pyrimidinyl]amino]-5-fluoro-N-methyl- (CA INDEX NAME)

RN 761437-84-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

RN 761437-85-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 761437-86-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 761437-88-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl-5-fluoro- (CA INDEX NAME)

RN 761437-91-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(1-pyrrolidinyl)-(CA INDEX NAME)

RN 761437-92-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(1-pyrrolidinyl)- (CA INDEX NAME)

RN 761437-93-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(1-pyrrolidinyl)- (CA INDEX NAME)

RN 761437-94-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl-5-(4-morpholinyl)- (CA INDEX NAME)

RN 761437-95-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-

pyrimidinyl]amino]-N-methyl-5-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 761437-96-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-5-methoxy-N-methyl- (CA INDEX NAME)

RN 761437-97-2 CAPLUS

CN Benzamide, 5-[1,4'-bipiperidin]-1'-yl-2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761438-00-0 CAPLUS

CN Benzamide, 2-[[2-[[4-(4-acetyl-1-piperaziny1)-2-methoxypheny1]amino]-5-

chloro-4-pyrimidinyl]amino]-N-methyl-5-(4-morpholinyl)- (CA INDEX NAME)

RN 761438-89-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761438-90-8 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761438-91-9 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761438-92-0 CAPLUS

CN 4-Piperidinol, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761438-93-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761438-95-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-N-methyl- (CA INDEX NAME)

RN 761438-96-4 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-2,6-dimethyl-1-piperazinyl]- (CA INDEX NAME)

RN 761438-97-5 CAPLUS

CN 1-Propanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761438-98-6 CAPLUS

CN 1-Propanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]-2-methyl- (CA INDEX NAME)

RN 761439-00-3 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-2,2-dimethyl-1-piperazinyl]- (CA INDEX NAME)

RN 761439-01-4 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-02-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 761439-03-6 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-04-7 CAPLUS

CN Ethanone, 1-[4-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-05-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[[2-(4-morpholinyl)ethyl]amino]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-06-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-(4-morpholinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-07-0 CAPLUS

CN 2-Pyrrolidinone, 1-[2-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenoxy]ethyl]- (CA INDEX NAME)

RN 761439-08-1 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxybenzoyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-09-2 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-

pyrimidinyl]amino]-3-methoxyphenyl]-4-morpholinyl- (CA INDEX NAME)

RN 761439-10-5 CAPLUS

CN 1-Piperazineacetamide, 4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-N-(1-methylethyl)- (CA INDEX NAME)

RN 761439-11-6 CAPLUS

CN 2-Piperazinone, 4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-12-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-methylethyl)-1-piperazinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-13-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-14-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[3-(methylamino)-1-pyrrolidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-15-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-16-1 CAPLUS

CN 4-Piperidinemethanol, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-17-2 CAPLUS

CN 3-Pyrrolidinol, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-18-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-19-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(4-fluoro-2-methoxyphenyl)-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-20-7 CAPLUS

CN Ethanone, 1-[4-[2-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenoxy]ethyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-21-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-22-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[4-(4-morpholinyl)-1-piperidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-23-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-(4-methyl-1-piperazinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-24-1 CAPLUS

CN 4-Piperidinol, 1-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl]- (CA INDEX NAME)

RN 761439-25-2 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(5-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-26-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[3-(methylamino)-1-pyrrolidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-27-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[5-[3-(dimethylamino)-1-pyrrolidinyl]-2-

methoxyphenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-28-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl]- (CA INDEX NAME)

RN 761439-29-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-30-9 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-(ethylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-31-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-(1H-1,2,4-triazol-1-yl)phenyl]- (CA INDEX NAME)

RN 761439-32-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-[4-(4-morpholinyl)-1-piperidinyl]phenyl]- (CA INDEX NAME)

RN 761439-33-2 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(ethylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-34-3 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(ethylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \text{Et} & \text{O} \\ & & & & \text{OMe} \\ & & & & \text{O} \\ & & & & & \text{NH} \\ & & & & & \text{NH} \\ & & & & & & \text{C1} \\ \end{array}$$

RN 761439-35-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (CA INDEX NAME)

RN 761439-36-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(ethylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 761439-37-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]- (CA INDEX NAME)

RN 761439-38-7 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761439-39-8 CAPLUS

CN 1-Piperazineethanol, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761439-40-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-morpholiny1)pheny1]-N4-[2-[(1-methylethyl)sulfonyl]pheny1]- (CA INDEX NAME)

RN 761439-41-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(1H-1,2,4-triazol-1-yl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-42-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-43-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[2-methyl-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-44-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(2-methoxy-4-nitrophenyl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-45-6 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-46-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-47-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(methoxymethyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-48-9 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-49-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-(4-ethyl-1-piperazinyl)-2-methoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-50-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-morpholiny1)-1-piperidiny1]pheny1]-N4-[2-[(1-methylethy1)sulfony1]pheny1]- (CA INDEX NAME)

RN 761439-51-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-methylethyl)-1-piperazinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-52-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761439-53-6 CAPLUS

CN 4-Piperidinol, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-54-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(3-methoxy-1-pyrrolidiny1)pheny1]-N4-[2-[(1-methylethyl)sulfony1]pheny1]- (CA INDEX NAME)

RN 761439-55-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-methoxy-1-piperidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-56-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-57-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(methylamino)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-58-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[3-(methylamino)-1-pyrrolidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-59-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-60-5 CAPLUS

CN 2-Piperazinone, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-methyl- (CA INDEX NAME)

RN 761439-61-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-methyl-4-piperidinyl)-1-piperazinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-62-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-63-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(9aS)-hexahydro-2H,6H-pyrazino[1,2-c][1,3]oxazin-2-yl]-2-methoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-64-9 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-65-0 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-66-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-(4-morpholinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-67-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- (2,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 761439-81-0 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-[(2-methylpropyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-82-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]-N4-[2-[(2-methylpropyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-85-4 CAPLUS

CN 2,4-Pyrimidinediamine, N4-[2-(butylsulfonyl)phenyl]-5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-86-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-methoxy-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-94-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(4-fluoro-2-methoxyphenyl)-N4-[4-(4-methyl-1-piperazinyl)-2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-95-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 845811-15-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-(4-morpholinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 845811-16-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[2-(4-morpholinyl)ethoxy]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 845811-17-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 845811-35-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-36-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-37-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[(1-ethyl-3-pyrrolidinyl)oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-38-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-39-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[[3-(dimethylamino)propyl]amino]-2-ethoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-40-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-41-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-ethoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]- (CA INDEX NAME)

RN 845811-43-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-ethoxy-4-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]- (CA INDEX NAME)

RN 845811-44-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-ethoxy-4-[(1-ethyl-3-pyrrolidinyl)oxy]phenyl]- (CA INDEX NAME)

RN 845811-45-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-46-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[4-[3-(dimethylamino)propyl]amino]-2-ethoxyphenyl]- (CA INDEX NAME)

RN 845811-47-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[4-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-54-3 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-ethoxyphenyl)-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-55-4 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-ethoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845811-62-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[(3R)-3-(ethylamino)-1-pyrrolidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-63-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-ethoxy-4-[(3R)-3-(ethylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-69-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl]-(CA INDEX NAME)

RN 845811-70-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(ethylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl]-(CA INDEX NAME)

RN 845811-71-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl]- (CA INDEX NAME)

RN 845811-72-5 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-ethoxyphenyl)-5-chloro-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 845811-73-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-ethoxy-4-[[(3S)-1-methyl-3-pyrrolidinyl]oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-74-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-ethoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845811-75-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-76-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-ethoxy-4-[(3S)-3-(methylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845811-77-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-ethoxy-4-(4-morpholinylcarbonyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845811-78-1 CAPLUS

CN Benzamide, 5-[1,4'-bipiperidin]-1'-yl-2-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845811-80-5 CAPLUS

CN Benzamide, 5-[1,4'-bipiperidin]-1'-yl-2-[[5-chloro-4-[[2-[(ethylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845811-81-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1,1-dimethylethoxy)phenyl]- (CA INDEX NAME)

RN 845811-83-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(ethylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1,1-dimethylethoxy)phenyl]- (CA INDEX NAME)

RN 845811-84-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1,1-dimethylethoxy)-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-86-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-(1,1-dimethylethoxy)-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl-(CA INDEX NAME)

RN 845811-88-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[4-(4-morpholinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845811-89-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-(1-methylethoxy)-4-[4-(4-morpholinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845812-23-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethyl-4-(4-methyl-1-piperazinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-41-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845812-49-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(1-ethyl-3-pyrrolidinyl)oxy]-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-51-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[[(3R)-1-methyl-3-pyrrolidinyl]oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845812-56-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[[(3S)-1-methyl-3-pyrrolidinyl]oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845812-61-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-66-0 CAPLUS

CN Methanone, [3-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl](4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 845812-70-6 CAPLUS

CN Methanone, [3-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-4-(1-methylethoxy)phenyl](4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 845812-73-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[2-(4-methyl-1-piperazinyl)ethyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-77-3 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-[1,4'-bipiperidin]-1'-yl-2-(1-methylethoxy)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-81-9 CAPLUS

CN Benzamide, 2-[[2-[[4-[1,4'-bipiperidin]-1'-yl-2-(1-methylethoxy)phenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845812-85-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 845812-86-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-90-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(1-methylethoxy)-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845812-96-6 CAPLUS

CN 2,4-Pyrimidinediamine, N4-[2-(butylsulfonyl)phenyl]-5-chloro-N2-[2-(1-methylethoxy)-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]- (CA INDEX NAME)

RN 845812-97-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[4-(4-morpholiny1)-1-piperidiny1]pheny1]-N4-[2-[(1-methylethyl)sulfony1]pheny1]- (CA INDEX NAME)

RN 845813-01-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[(2S)-2-(1-pyrrolidinylmethyl)-1-pyrrolidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845813-05-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845813-08-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[[(3R)-1-methyl-3-pyrrolidinyl]oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845813-19-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845813-20-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinylcarbonyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845813-24-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[[(3S)-1-methyl-3-pyrrolidinyl]oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845813-25-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-4-[[(3R)-1-methyl-3-pyrrolidinyl]oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845813-29-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[[(3S)-1-methyl-3-pyrrolidinyl]oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845813-40-3 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-4-morpholinyl- (CA INDEX NAME)

RN 845813-66-3 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-[1,4'-bipiperidin]-1'-yl-2-(cyclopropylmethoxy)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845813-67-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-(cyclopropylmethoxy)-4-[4-(4-morpholinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845813-71-0 CAPLUS

CN Methanone, [1,4'-bipiperidin]-1'-yl[4-[[5-chloro-4-[[2-[(1-

methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl](CA INDEX NAME)

RN 845813-75-4 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl](4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 845813-76-5 CAPLUS

CN Methanone, [1,4'-bipiperidin]-1'-yl[4-[[5-chloro-4-[[2-(cyclohexylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl]-(CA INDEX NAME)

RN 845814-12-2 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-(cyclohexylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-4-morpholinyl- (CA INDEX NAME)

RN 845814-14-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-methoxy-4-[[(3R)-1-methyl-3-pyrrolidinyl]oxy]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845814-16-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-methoxy-4-[[(3S)-1-methyl-3-pyrrolidinyl]oxy]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845814-22-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-ethoxy-4-[[(3R)-1-methyl-3-pyrrolidinyl]oxy]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845814-25-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-ethoxy-4-[[(3S)-1-methyl-3-pyrrolidinyl]oxy]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845814-26-8 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-(cyclohexylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl]-4-morpholinyl- (CA INDEX NAME)

RN 845814-43-9 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[(2-methoxy-5-methylphenyl)amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-44-0 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[(2,5-dimethoxyphenyl)amino]-4-pyrimidinyl]amino]-

N-ethyl- (CA INDEX NAME)

RN 845814-45-1 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[[2,5-diethoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-46-2 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[[2-methoxy-5-[2-(4-morpholinyl)ethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-51-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(2-methoxy-5-methylphenyl)amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-52-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(2,5-dimethoxyphenyl)amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-53-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2,5-diethoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-54-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-[2-(4-morpholinyl)ethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845814-80-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-bromo-N2-[2-ethoxy-4-(4-morpholinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 845814-82-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-3-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]-N4-[2-[(2-methylpropyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845814-83-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-3-[(1-ethyl-3-pyrrolidinyl)oxy]phenyl]-N4-[2-[(2-methylpropyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845814-84-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-ethoxy-3-[(1-ethyl-3-pyrrolidinyl)oxy]phenyl]-N4-[2-(ethylsulfonyl)phenyl]- (CA INDEX NAME)

RN 845814-90-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[3-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]-N4-[2-[(2-methylpropyl)sulfonyl]phenyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 845814-91-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[3-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-2-ethoxyphenyl]-N4-[2-[(2-methylpropyl)sulfonyl]phenyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 845814-99-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1-methylethoxy)phenyl]- (CA INDEX NAME)

RN 845815-01-2 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-[1,4'-bipiperidin]-1'-yl-2- (trifluoromethyl)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-04-5 CAPLUS

CN Benzamide, 2-[[2-[[4-[1,4'-bipiperidin]-1'-yl-2-(trifluoromethyl)phenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845815-05-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-(trifluoromethyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845815-07-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-(trifluoromethyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845815-08-9 CAPLUS

CN Benzonitrile, 2-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-5-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 845815-10-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-cyano-4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845815-11-4 CAPLUS

CN 2,4-Pyrimidinediamine, N2-[4-[1,4'-bipiperidin]-1'-yl-2-(2,2,2-trifluoroethoxy)phenyl]-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

ΙT 845815-12-5P 845815-13-6P 845815-18-1P 845815-19-2P 845815-20-5P 845815-29-4P 845815-30-7P 845815-31-8P 845815-36-3P 845815-37-4P 845815-38-5P 845815-39-6P 845815-40-9P 845815-41-0P 845815-46-5P 845815-47-6P 845815-48-7P 845815-49-8P 845815-63-6P 845815-62-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,4-pyrimidinediamines useful in the treatment of neoplastic diseases, inflammatory and immune system disorders)

RN 845815-12-5 CAPLUS

CN Benzamide, 2-[[2-[[4-[1,4'-bipiperidin]-1'-yl-2-(2,2,2-trifluoroethoxy)phenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845815-13-6 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-ethoxyphenyl]-(CA INDEX NAME)

RN 845815-18-1 CAPLUS

CN 2-Pyrrolidinone, 1-[1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-(1-methylethoxy)phenyl]-4-piperidinyl]- (CA INDEX NAME)

RN 845815-19-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[4-[2-(dimethylamino)ethyl]-1-piperazinyl]-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-20-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-(1,4-dioxa-8-azaspiro[4.5]dec-8-yl)-2-(1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-29-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methyl-6-(4-morpholinyl)-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845815-30-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(dimethylamino)-1-piperidinyl]-2-(1-methylethoxy)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845815-31-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-(1-methylethoxy)-4-[4-(2-oxo-1-pyrrolidinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 845815-36-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-[2-methyl-6-(4-morpholinyl)-3-pyridinyl]- (CA INDEX NAME)

RN 845815-37-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[4-(dimethylamino)-1-piperidinyl]-2- (1-methylethoxy)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-38-5 CAPLUS

CN Benzamide, 2-[[2-[(6-[1,4'-bipiperidin]-1'-yl-2-methyl-3-pyridinyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845815-39-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[6-[4-(dimethylamino)-1-piperidinyl]-2-methyl-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 845815-40-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[6-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-methyl-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845815-41-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[6-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-2-methyl-3-pyridinyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 845815-46-5 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(6-[1,4'-bipiperidin]-1'-yl-2-methyl-3-pyridinyl)-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-47-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[6-[4-(dimethylamino)-1-piperidinyl]-2-methyl-3-pyridinyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-48-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[6-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]-2-methyl-3-pyridinyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 845815-49-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[6-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-2-methyl-3-pyridinyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-(CA INDEX NAME)

Absolute stereochemistry.

RN 845815-62-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 845815-63-6 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(5-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 49 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
       2005:158646 CAPLUS
ΑN
DN
       142:254587
       Methods for treating or preventing autoimmune diseases with
ΤI
       2,4-pyrimidinediamine compounds
IN
       Rajinder, Singh; Ankush, Argade; Li, Hui; Bhamidipati, Somasekhar;
       Carroll, David; Sylvain, Catherine; Clough, Jeffrey; Keim, Holger
       Rigel Pharmaceuticals, Inc., USA
PA
       PCT Int. Appl., 276 pp.
       CODEN: PIXXD2
DT
       Patent
LA
       English
FAN.CNT 6
       PATENT NO.
                             KIND DATE
                                                          APPLICATION NO.
                                                                                          DATE
                                 ____
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      WO 2005016893
      A2
      20050224

      WO 2005016893
      A3
      20050609

                                                           WO 2004-US24716
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       BR 2004013018 A
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     CN 1849318 A Z0001010
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NZ 545270 A 20100430
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IN 2006KN00449 A 20070622
NO 2006000992 A 20060228
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A1 20081218
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                                                           KR 2006-701947
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                                                           MX 2006-1099
                                                                                           20060127
                                                           IN 2006-KN449
                                                                                           20060227
                                                           NO 2006-992
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                                                            US 2006-539147
                                                                                           20061005
US 2006-539142
                                                                                            20061005
                                                            US 2006-539520
                                                                                            20061006
                                                            US 2009-487486
                                                                                            20090618
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US 2004-903870 A1 20040730 WO 2004-US24716 W 20040730 US 2006-539520 A1 20061006

OS MARPAT 142:254587

AB The invention provides methods for treating or preventing autoimmune diseases with 2,4-pyrimidinediamine compds., as well as methods of treating, preventing or ameliorating symptoms associated with such diseases. Specific examples of autoimmune diseases that can be treated or prevented with the compds. include rheumatoid arthritis and/or its associated symptoms, systemic lupus erythematosis and/or its associated symptoms and multiple sclerosis and/or its associated symptoms.

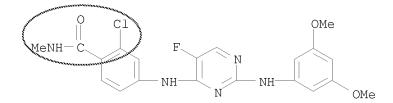
IT 844434-19-1P 844434-20-4P 844434-21-5P 845817-88-1P 845817-89-2P 845817-90-5P 845817-93-8P 845820-86-2P 845820-87-3P 845820-88-4P 845820-90-8P 845820-91-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pyrimidinediamine compds. for treatment or prevention of autoimmune diseases)

RN 844434-19-1 CAPLUS

CN Benzamide, 2-chloro-4-[[2-[(3,5-dimethoxyphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)



RN 844434-20-4 CAPLUS

CN Benzamide, 2-chloro-4-[[2-[(3,5-dimethylphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 844434-21-5 CAPLUS

CN Benzamide, 2-chloro-4-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845817-88-1 CAPLUS

CN Benzamide, 2-chloro-5-[[2-[(3,5-dimethoxyphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845817-89-2 CAPLUS

CN Benzamide, 2-chloro-5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845817-90-5 CAPLUS

CN Benzamide, 2-chloro-4-[[4-[[4-chloro-3-[(methylamino)carbonyl]phenyl]amino]-5-fluoro-2-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845817-93-8 CAPLUS

CN Benzamide, 2-chloro-4-[[2-[[4-chloro-3-[(methylamino)carbonyl]phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 845820-86-2 CAPLUS

CN Glycine, N-[4-[[5-fluoro-2-[[3-(hydroxymethyl)phenyl]amino]-4-pyrimidinyl]amino]benzoyl]-, methyl ester (CA INDEX NAME)

RN 845820-87-3 CAPLUS

CN Glycine, N-[4-[[2-[(3,5-dichloro-4-hydroxyphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]benzoyl]-, methyl ester (CA INDEX NAME)

RN 845820-88-4 CAPLUS

CN Glycine, N-[4-[[2-[(3-chloro-4-hydroxyphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]benzoyl]-, methyl ester (CA INDEX NAME)

RN 845820-90-8 CAPLUS

CN Glycine, N,N'-[(5-fluoro-2,4-pyrimidinediyl)bis(imino-4,1-phenylenecarbonyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

RN 845820-91-9 CAPLUS

CN Glycine, N-[4-[[2-[[4-(aminocarbonyl)phenyl]amino]-5-fluoro-4-pyrimidinyl]amino]benzoyl]-, methyl ester (CA INDEX NAME)

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

## 10/568,367 (RCE)

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 50 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2005:136565 CAPLUS
ΑN
DN
    142:212327
     2,4-pyrimidinediamine compounds and uses as antiproliferative agents
TI
IN
     Argade, Ankush; Singh, Rajinder; Li, Hui; Carroll, David; Catalano, Susan
PA
     Rigel Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 179 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 6
                       KIND DATE
     PATENT NO.
                                           APPLICATION NO.
                                                                   DATE
                        ____
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     WO 2005013996
                        A2
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                                           WO 2004-US25409
                                                                   20040806
PΙ
                         A3 20050609
     WO 2005013996
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             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
        SN, TD, TG
                                          US 2004-913270
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     EP 1663242
                         A2
                                                                    20040806
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             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                              20070201 JP 2006-522744
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                                            US 2006-567506
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                               20071227
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                                                                   20061207
    US 20080021020 A1 20080124

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                                           US 2006-567820
                                                                   20061207
PRAI US 2003-494008P
     US 2004-628199P
                        P
                               20041115
     US 2004-628496P
                        Р
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     US 2005-650195P
                         Ρ
                                20050203
                      A1 20050518
     US 2005-133419
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    MARPAT 142:212327
OS
     The invention provides 2,4-pyrimidinediamine compds. having
AΒ
     antiproliferative activity, compns. comprising the compds. and methods of
     using the compds. to inhibit cellular proliferation and to treat
     proliferative diseases such as tumorigenic cancers.
     844434-19-1P
                     844434-20-4P 844434-21-5P
ΙT
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
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treatment of cancer)

(pyrimidinediamine compds. and uses as antiproliferative agents for

RN 844434-19-1 CAPLUS

CN Benzamide, 2-chloro-4-[[2-[(3,5-dimethoxyphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 844434-20-4 CAPLUS

CN Benzamide, 2-chloro-4-[[2-[(3,5-dimethylphenyl)amino]-5-fluoro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 844434-21-5 CAPLUS

CN Benzamide, 2-chloro-4-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS) RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

## 10/568,367 (RCE)

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2004:780679 CAPLUS
- DN 141:296041
- TI Preparation of novel 2,4-di(phenylamino)pyrimidines useful in the treatment of neoplastic diseases, inflammatory and immune system disorders
- IN Garcia-Echeverria, Carlos; Kanazawa, Takanori; Kawahara, Eiji; Masuya, Keiichi; Matsuura, Naoko; Miyake, Takahiro; Ohmori, Osamu; Umemura, Ichiro
- PA Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
- SO PCT Int. Appl., 185 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

FAN.	PATENT NO.					KIND		DATE		APPLICATION NO.						DATE			
ΡI	WO	2004080980				A1	_	20040923		WO 2004-EP2616						20040312			
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			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	,
			NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	,
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	WO	2004	-EP2					2004	0312										
	IN	2005	-CN2			АЗ		2005											

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 141:296041

AB The title pyrimidine derivs. I [R0-R3 = H, alkyl, aryl, etc.; or R0 and R1, R1 and R2, and/or R2 and R3 form, together with the carbon atoms to which they are attached, 5-6 membered carbocyclic or heterocyclic ring comprising 0-3 heteroatoms selected from N, O and S; R4 = H, alkyl; R5, R6 = H, alkyl, alkoxyalkyl, halo, etc.; R7-R10 = alkyl, cycloalkyl, aryl, etc.; or R7 and R8, R8 and R9, and/or R9 and R10 form, together with the carbon atoms to which they are attached, 5-6 membered carbocyclic or heterocyclic ring comprising 0-3 heteroatoms selected from N, O and S; A =

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C, N], useful as FAK or/and IGF-1 receptor inhibitors in the treatment of
     neoplastic diseases, inflammatory and immune system disorders, were prepared
     and formulated. E.g., a 2-step synthesis of II from
     2,4-dichloro-5-nitropyrimidine, 2-amino-N-methylbenzenesulfonamide, and
     2,5-dimethoxyaniline which showed IC50 of 140 nM in FAK assay, was given.
     The pharmaceutical composition comprising the compound I is claimed.
ΙT
     761437-28-9P
                      761437-29-0P
                                        761437-30-3P
     761437-31-4P
                      761437-32-5P
                                        761437-33-6P
     761437-34-7P
                      761437-35-8P
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                      761439-85-4P
                                        761439-86-5P
     761439-94-5P
                      761439-95-6P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of 2,4-di(phenylamino)pyrimidines as FAK or/and IGF-1 receptor
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## 10/568,367 (RCE)

inhibitors useful in the treatment of neoplastic diseases, inflammatory and immune system disorders)

RN 761437-28-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-29-0 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-30-3 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761437-31-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-32-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[2-(4-morpholinyl)ethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-33-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-34-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-35-8 CAPLUS

CN Benzamide, 2-[[2-[[4-(4-acetyl-1-piperazinyl)-2-methoxyphenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-36-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-(4-hydroxy-1-piperidinyl)-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-37-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[4-(2-ethoxyethoxy)-1-piperidinyl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

## 10/568,367 (RCE)

RN 761437-39-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(2-methoxyethoxy)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-40-5 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-41-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[3-(methylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-42-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761437-43-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-44-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(9aR)-hexahydropyrazino[2,1-c][1,4]oxazin-8(1H)-yl]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-45-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[4-[(9aS)-hexahydropyrazino[2,1-c][1,4]oxazin-8(1H)-y1]-2-methoxyphenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-46-1 CAPLUS
CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl], (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-47-2 CAPLUS
CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2[(methylamino)carbonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl], (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761437-48-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-49-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)methoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-50-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[2-(4-methyl-1-piperazinyl)ethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-51-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-52-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-5-[3-(methylamino)-1-pyrrolidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-53-0 CAPLUS

CN Benzamide, 2-[[2-[(5-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-54-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

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RN 761437-55-2 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-59-6 CAPLUS

CN Benzamide, 2-[[2-[[5-(4-acetyl-1-piperazinyl)-2-methoxyphenyl]amino]-5-chloro-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-60-9 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[[2-methoxy-5-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-61-0 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-62-1 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[(5-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-63-2 CAPLUS

CN Benzamide, 2-[[5-bromo-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761437-64-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-65-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-66-5 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-67-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[4-(1-pyrrolidiny1)-1-piperidiny1]pheny1]amino]-4-pyrimidiny1]amino]-N-ethyl- (CA INDEX NAME)

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RN 761437-68-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-69-8 CAPLUS

CN Benzamide, 2-[[2-[(5-[1,4'-bipiperidin]-1'-y1-2-methoxyphenyl)amino]-5-

chloro-4-pyrimidinyl]amino]-N-ethyl- (CA INDEX NAME)

RN 761437-70-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N,6-dimethyl- (CA INDEX NAME)

RN 761437-71-2 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-N,6-dimethyl- (CA INDEX NAME)

RN 761437-72-3 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N,6-dimethyl- (CA INDEX NAME)

RN 761437-73-4 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-5-fluoro-N-methyl- (CA INDEX NAME)

RN 761437-74-5 CAPLUS

CN Benzamide, 2-[[2-[(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)amino]-5-chloro-4-pyrimidinyl]amino]-5-fluoro-N-methyl- (CA INDEX NAME)

RN 761437-76-7 CAPLUS

CN Benzamide, 2-[[2-[[4-(4-acetyl-1-piperazinyl)-2-methoxyphenyl]amino]-5-chloro-4-pyrimidinyl]amino]-5-fluoro-N-methyl- (CA INDEX NAME)

RN 761437-84-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N,N-dimethyl- (CA INDEX NAME)

RN 761437-85-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-(1-methylethyl)- (CA INDEX NAME)

RN 761437-86-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-4,5-difluoro-N-methyl- (CA INDEX NAME)

RN 761437-88-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-ethyl-5-fluoro- (CA INDEX NAME)

RN 761437-91-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(1-pyrrolidinyl)-(CA INDEX NAME)

RN 761437-92-7 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(1-pyrrolidinyl)- (CA INDEX NAME)

RN 761437-93-8 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(1-pyrrolidinyl)- (CA INDEX NAME)

RN 761437-94-9 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl-5-(4-morpholinyl)- (CA INDEX NAME)

RN 761437-95-0 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-

pyrimidinyl]amino]-N-methyl-5-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

RN 761437-96-1 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-5-methoxy-N-methyl- (CA INDEX NAME)

RN 761437-97-2 CAPLUS

CN Benzamide, 5-[1,4'-bipiperidin]-1'-yl-2-[[5-chloro-2-[(4-fluoro-2-methoxyphenyl)amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RN 761438-00-0 CAPLUS

CN Benzamide, 2-[[2-[[4-(4-acetyl-1-piperaziny1)-2-methoxypheny1]amino]-5-

chloro-4-pyrimidinyl]amino]-N-methyl-5-(4-morpholinyl)- (CA INDEX NAME)

RN 761438-89-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761438-90-8 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761438-91-9 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761438-92-0 CAPLUS

CN 4-Piperidinol, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761438-93-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761438-95-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-N-methyl- (CA INDEX NAME)

RN 761438-96-4 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-2,6-dimethyl-1-piperazinyl]- (CA INDEX NAME)

RN 761438-97-5 CAPLUS

CN 1-Propanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761438-98-6 CAPLUS

CN 1-Propanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]-2-methyl- (CA INDEX NAME)

RN 761438-99-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-N-methyl- (CA INDEX NAME)

RN 761439-00-3 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-2,2-dimethyl-1-piperazinyl]- (CA INDEX NAME)

RN 761439-01-4 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-02-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-03-6 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-04-7 CAPLUS

CN Ethanone, 1-[4-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-05-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[[2-(4-morpholinyl)ethyl]amino]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-06-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-(4-morpholinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-07-0 CAPLUS

CN 2-Pyrrolidinone, 1-[2-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenoxy]ethyl]- (CA INDEX NAME)

RN 761439-08-1 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxybenzoyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-09-2 CAPLUS

CN Methanone, [4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-4-morpholinyl- (CA INDEX NAME)

RN 761439-10-5 CAPLUS

CN 1-Piperazineacetamide, 4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-N-(1-methylethyl)- (CA INDEX NAME)

RN 761439-11-6 CAPLUS

CN 2-Piperazinone, 4-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-12-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-methylethyl)-1-piperazinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-13-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-14-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[3-(methylamino)-1-pyrrolidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-15-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-16-1 CAPLUS

CN 4-Piperidinemethanol, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-17-2 CAPLUS

CN 3-Pyrrolidinol, 1-[4-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-18-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-19-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(4-fluoro-2-methoxyphenyl)-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-20-7 CAPLUS

CN Ethanone, 1-[4-[2-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenoxy]ethyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-21-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-22-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[4-(4-morpholiny1)-1-piperidiny1]pheny1]-N4-[2-(propylsulfony1)pheny1]- (CA INDEX NAME)

RN 761439-23-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-(4-methyl-1-piperazinyl)phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-24-1 CAPLUS

CN 4-Piperidinol, 1-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl]- (CA INDEX NAME)

RN 761439-25-2 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(5-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-26-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-[3-(methylamino)-1-pyrrolidinyl]phenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-27-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[5-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]-N4-[2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-28-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[3-[[5-chloro-4-[[2-(propylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-4-methoxyphenyl]- (CA INDEX NAME)

RN 761439-29-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-30-9 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-(ethylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-31-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-(1H-1,2,4-triazol-1-yl)phenyl]- (CA INDEX NAME)

RN 761439-32-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-[4-(4-morpholinyl)-1-piperidinyl]phenyl]- (CA INDEX NAME)

RN 761439-33-2 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-(ethylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-34-3 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(ethylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-35-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (CA INDEX NAME)

RN 761439-36-5 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-(ethylsulfonyl)phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 761439-37-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(ethylsulfonyl)phenyl]-N2-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]- (CA INDEX NAME)

RN 761439-38-7 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761439-39-8 CAPLUS

CN 1-Piperazineethanol, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761439-40-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]-N4- [2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-41-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(1H-1,2,4-triazol-1-yl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-42-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-methyl-1-

piperazinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl] (CA INDEX NAME)

RN 761439-43-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2- [2-methyl-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-44-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(2-methoxy-4-nitrophenyl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-45-6 CAPLUS

CN 2,4-Pyrimidinediamine, N2-(4-[1,4'-bipiperidin]-1'-yl-2-methoxyphenyl)-5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-46-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-pyrrolidinyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-47-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(methoxymethyl)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-48-9 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-49-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-(4-ethyl-1-piperazinyl)-2-methoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-50-3 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(4-morpholiny1)-1-piperidiny1]pheny1]-N4-[2-[(1-methylethy1)sulfony1]pheny1]- (CA INDEX NAME)

RN 761439-51-4 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-methylethyl)-1-piperazinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-52-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-(CA INDEX NAME)

RN 761439-53-6 CAPLUS

CN 4-Piperidinol, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]- (CA INDEX NAME)

RN 761439-54-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(3-methoxy-1-pyrrolidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-55-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-methoxy-1-piperidinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-56-9 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-57-0 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(methylamino)-1-piperidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-58-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[3-(methylamino)-1-pyrrolidinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-59-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[3-(dimethylamino)-1-pyrrolidinyl]-2-methoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-60-5 CAPLUS

CN 2-Piperazinone, 4-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-methyl- (CA INDEX NAME)

RN 761439-61-6 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-methyl-4-piperidinyl)-1-piperazinyl]phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-62-7 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-[4-(1-piperaziny1)-1-piperidiny1]pheny1]-N4-[2-[(1-methylethyl)sulfonyl]pheny1]- (CA INDEX NAME)

RN 761439-63-8 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[4-[(9aS)-hexahydro-2H,6H-pyrazino[1,2-c][1,3]oxazin-2-y1]-2-methoxyphenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-64-9 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-65-0 CAPLUS

CN 3-Piperidinecarboxamide, 1-[4-[[5-chloro-4-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 761439-66-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-5-(4-morpholinyl)phenyl]-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-67-2 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-[(1-methylethyl)sulfonyl]phenyl]-N2-(2,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 761439-81-0 CAPLUS

CN Ethanone, 1-[4-[4-[[5-chloro-4-[[2-[(2-methylpropyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]-3-methoxyphenyl]-1-piperazinyl]- (CA INDEX NAME)

RN 761439-82-1 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]-N4- [2-[(2-methylpropyl)sulfonyl]phenyl]- (CA INDEX NAME)

RN 761439-85-4 CAPLUS

CN 2,4-Pyrimidinediamine, N4-[2-(butylsulfonyl)phenyl]-5-chloro-N2-[2-methoxy-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-86-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N4-[2-(cyclohexylsulfonyl)phenyl]-N2-[2-

methoxy-4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 761439-94-5 CAPLUS

CN 2,4-Pyrimidinediamine, 5-chloro-N2-(4-fluoro-2-methoxyphenyl)-N4-[4-(4-methyl-1-piperazinyl)-2-(propylsulfonyl)phenyl]- (CA INDEX NAME)

RN 761439-95-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-5-(4-methyl-1-piperazinyl)- (CA INDEX NAME)

OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2004:675730 CAPLUS
- DN 141:207218
- TI Pyrimidine derivatives for the prevention of HIV infection
- IN Janssen, Paul Adriaan Jan; Heeres, Jan; Lewi, Paulus Joannes; De Jonge, Marc Rene; Koymans, Lucien Maria Henricus; Daeyaert, Frederik Frans Desire; Vinkers, Hendrik Maarten
- PA Janssen Pharmaceutica N.V., Belg.; Arts, Theodora Joanna Francisca; Janssen, Graziella Maria Constantina; Janssen, Herwig Josephus Margareta; Janssen, Jasmine Josee Werner; Janssen, Paul Peter Maria; Janssen, Maroussia Godelieve Frank; Guillemont, Jerome Emile Georges; Pasquier, Elisabeth Therese Jeanne
- SO PCT Int. Appl., 56 pp. CODEN: PIXXD2
- CODEN. FI
- DT Patent
- LA English

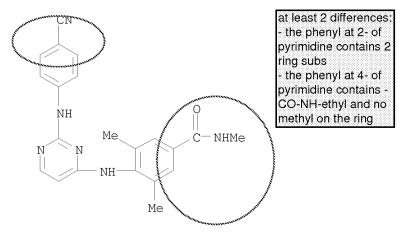
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AB This invention concerns the use of a compound I [al:a2a3:a4, bl:b2b3:b4 = atoms to form Ph, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl rings; n = 0-5; m = 1-4; R1 = H, aryl, CHO, alkylcarbonyl, alkyl, alkyloxycarbonyl, alkylcarbonyl, etc.; R2 = OH, halo, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, alkoxycarbonyl, carboxyl, CN, NO2, NH2, polyhalomethyl, polyhalomethoxy, polyhalomethylthio, SOpR6, NHSOpR6, COR6, NHCOH, CONHNH2, NHCOR6, C(:NH)R6, 5-membered heterocycle; X1 = NR5, NHNH, N:N, O, CO, alkanediyl, CH(OH), S, SOp, X2-alkanediyl, alkanediyl-X2; X2 =

## 10/568,367 (RCE)

NR5, NHNH, N:N, O, CO, CH(OH), S, SOp; R3 = NHR13, NR13R14, CONHR13, CONR13R14, COR15, CH:NNHCOR16, substituted alkyl, (substituted) alkoxyalkyl, substituted alkenyl, alkynyl, alkyl substituted with OH and a second substituent, C(:NOR8)-alkyl, R7, X3R7; R4 = halo, OH, alkyl, cycloalkyl, alkoxy, CN, NO2, polyhaloalkyl, polyhaloalkoxy, aminocarbonyl, alkyloxycarbonyl, alkylcarbonyl, CHO, NH2; R5 = H, aryl, CHO, alkylcarbonyl, alkyl, alkoxycarbonyl, etc.; R6 = alkyl, amino, polyhaloalkyl; R7 = mono-, bi-, or tricyclic (aromatic) carbocyclyl, heterocyclyl; R13, R14 = alkyl, alkenyl, alkynyl optionally substituted by cyano, aminocarbonyl; R15 = cyanoalkyl, aminocarbonylalkyl; R16 = R15, R7; p = 1, 2 for the manufacture of a medicament for the prevention of HIV infection via sexual intercourse and related intimate contact between partners, and pharmaceutical compns. comprising them. Preparation of compds. I is disclosed and described in WO 2003/016306. A 2-step synthesis of novel compound I,  $(E)-4-(\{4-[4-(2-cyanoetheny1)-2,6-dimethylphenoxy]-2$ pyrimidinyl}amino)benzonitrile, starting from 4-hydroxy-3,5-dimethylbenzaldehyde and 4-[(4-chloro-2-pyrimidiny1)amino]benzonitrile, which showed pIC50 of 9.00 when tested for anti-HIV properties, was given. 500288-32-4 500290-33-5 500290-35-7 500290-37-9 500290-39-1 500290-41-5 500290-43-7 500290-49-3 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pyrimidine derivs. for the prevention of HIV infection) 500288-32-4 CAPLUS Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,3,5-



trimethyl- (CA INDEX NAME)

RN 500290-33-5 CAPLUS

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CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,N,3,5-tetramethyl- (CA INDEX NAME)

RN 500290-35-7 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N-ethyl-N,3,5-trimethyl- (CA INDEX NAME)

RN 500290-37-9 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,N-diethyl-3,5-dimethyl- (CA INDEX NAME)

RN 500290-39-1 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N-ethyl-3,5-dimethyl- (CA INDEX NAME)

RN 500290-41-5 CAPLUS

CN Benzamide, N-(cyanomethyl)-4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethyl- (CA INDEX NAME)

RN 500290-43-7 CAPLUS

CN Benzamide, N-(cyanomethyl)-4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,3,5-trimethyl- (CA INDEX NAME)

RN 500290-49-3 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethyl-N-(1-methylethyl)- (CA INDEX NAME)

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 53 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
      2004:486399 CAPLUS
ΑN
      141:54353
DN
      Pharmaceutical compositions comprising a surfactant and a physiologically
ΤI
      tolerable water-soluble acid respectively base, and a basic respectively
      acidic drug compound, containing a pyrimidine unit, for treating HIV
ΙN
      Vandecruys, Roger Petrus Gerebern
PA
      Janssen Pharmaceutica N.V., Belg.
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      PCT Int. Appl., 138 pp.
      CODEN: PIXXD2
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      WO 2004050068
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      IN 2005DN02185
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NO 2005003143 A 20050627

PRAI WO 2002-EP13558 A 20021129
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                                                    NO 2005-3143
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20050627

WO 2003-EP50890 W 20031125

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention provides a novel pharmaceutical composition for treating HIV comprising a basic resp. acidic drug compound I, a surfactant and a physiol. tolerable water-soluble acid resp. base in which the acid resp. base:drug compound ratio is at least 1:1 by weight [wherein X = 0, NH; Y = NH, NMe; R1 = Me, H; R2 = Me, Cl, Br, OMe, 2-furanyl, etc.; R3 = H, 2-benzofuranyl, 1-naphthalenyl, (un)substituted Ph, CH2CH2CN, CH:CHCN, etc.; R4 = H, NO2, NH2, etc.; their N-oxides, pharmaceutically acceptable addition salts, quaternary amines, or stereochem. isomeric forms]. Ten pharmaceutical compns. are given. Thus, amination of

 $4-[(4-\text{chloro}-2-\text{pyrimidinyl})\,\text{amino}]\,\text{benzonitrile}$  (preparation given) with amine II (preparation given) in the presence of K2CO3/CH2Cl2/MeOH at 150° for 1 h gave the title compound III. Selected I displayed pIC50 values in the range 8.0-9.5 for the inhibition of the HIV-induced cytopathic effect.

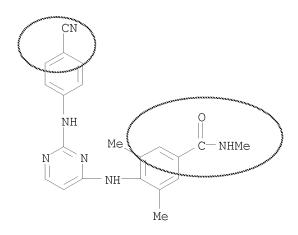
IT 500288-32-4P 500290-33-5P 500290-35-7P 500290-37-9P 500290-39-1P 500290-41-5P 500290-43-7P 500290-49-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(anti-HIV agent; preparation of pyrimidine-based anti-HIV agents and their pharmaceutical compns.)

RN 500288-32-4 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,3,5-trimethyl- (CA INDEX NAME)



RN 500290-33-5 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,N,3,5-tetramethyl- (CA INDEX NAME)

RN 500290-35-7 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N-ethyl-N,3,5-trimethyl- (CA INDEX NAME)

RN 500290-37-9 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,N-diethyl-3,5-dimethyl- (CA INDEX NAME)

RN 500290-39-1 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N-ethyl-3,5-dimethyl- (CA INDEX NAME)

RN 500290-41-5 CAPLUS

CN Benzamide, N-(cyanomethyl)-4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethyl- (CA INDEX NAME)

RN 500290-43-7 CAPLUS

CN Benzamide, N-(cyanomethyl)-4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,3,5-trimethyl- (CA INDEX NAME)

RN 500290-49-3 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethyl-N-(1-methylethyl)- (CA INDEX NAME)

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 54 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2004:142963 CAPLUS
- DN 140:199334
- TI Preparation of 2,4-pyrimidinediamines as IgE and/or IgG receptor modulators for treatment of autoimmune diseases
- IN Singh, Rajinder; Argade, Ankush; Payan, Donald G.; Clough, Jeffrey; Keim, Holger; Sylvain, Catherine; Li, Hui; Bhamidipati, Somasekhar
- PA Rigel Pharmaceuticals, USA
- SO PCT Int. Appl., 811 pp. CODEN: PIXXD2
- DT Patent

LA	English																	
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	PATENT	NO.		VIMI		DAIE			LICAI									
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	RU 2376	992		T C2		20091		I	RU	2005-	1053	44	20030729 20030729 20050126					
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US 2006-539054
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 140:199334; MARPAT 140:199334

The present invention provides methods of treating or preventing AB autoimmune diseases with 2,4-pyrimidinediamine compds., as well as methods of treating, preventing or ameliorating symptoms associated with such diseases. Title compds. I [wherein L1 and L2 = independently a bond or a linker; R2 = (un)substituted alkyl, (hetero)cycloalkyl, or (hetero)aryl; R4 = H or R2; R5 = R6 or (un)substituted alkyl, alkenyl, or alkynyl; R6 = independently H, an electroneg. group, protected alc. or thiol, haloalkyl(oxy), halo, CN, NC, OCN, SCN, NO, NO2, N3, or (un)substituted amino, sulfamoyl(oxy), acyl, carboxy, carbamoyl, (hetero)aryl(alkyl), etc.; with provisos and exclusions; and salts, hydrates, solvates, N-oxides, and prodrugs thereof] were prepared as inhibitors of the IgE and/or IgG receptor signaling cascades that lead to the release of chemical mediators. For example, coupling of 2,4-dichloropyrimidine with 4-ethoxyaniline in EtOH provided N2, N4-bis(4-ethoxyphenyl)-2,4pyrimidinediamine (II). The latter inhibited degranulation of bone marrow derived mast cells challenged with anti-IgE and ionomycin with IC50 values of 4.5  $\mu\text{M}$  and 4.4  $\mu\text{M}$ , resp. Thus, I and their pharmaceutical compns. are useful in the treatment and prevention of diseases characterized by, caused by, or associated with the release of chemical mediators via degranulation of mast, basophil, neutrophil, or eosinophil cells and other processes effected by activation of the IqE and/or IqG receptor signaling cascades. Specific examples of autoimmune diseases that can be treated or prevented with I and their pharmaceutical compns. include rheumatoid arthritis, systemic lupus erythematosis, and multiple sclerosis (no data).

IT 575484-59-2P 575484-65-0P 662227-39-6P 662227-46-5P 662227-55-6P 662227-67-0P

RN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgE and/or IgG receptor modulator; preparation of pyrimidinediamines as IgE and/or IgG receptor modulators for treatment of autoimmune diseases) 575484-59-2 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-methyl- (CA INDEX NAME)

RN 575484-65-0 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-(1-methylethyl)- (CA INDEX NAME)

RN 662227-39-6 CAPLUS

CN Benzamide, N-(2-aminoethy1)-5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]pheny1]amino]-4-pyrimidiny1]amino]-2-(trifluoromethoxy)- (CA INDEX NAME)

RN 662227-46-5 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-methyl-2-(trifluoromethoxy)- (CA INDEX NAME)

RN 662227-55-6 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-N-[2-(methylamino)ethyl]-2-(trifluoromethoxy)- (CA INDEX NAME)

RN 662227-67-0 CAPLUS

CN Benzamide, N-[(2R)-2,3-dihydroxypropyl]-5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-(trifluoromethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2003:610204 CAPLUS
- DN 139:164801
- TI Preparation of 2,4-pyrimidinediamines as IgE and/or IgG receptor modulators for treatment of allergic diseases, inflammatory conditions, and tissue destruction
- IN Singh, Rajinder; Argade, Ankush; Payan, Donald G.; Molineaux, Susan; Holland, Sacha J.; Clough, Jeffrey; Keim, Holger; Bhamidipati, Somasekhar; Sylvain, Catherine; Li, Weigun; Rossi, Alexander B.
- PA Rigel Pharmaceuticals, Inc., USA
- SO PCT Int. Appl., 648 pp. CODEN: PIXXD2
- DT Patent
- LA English

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I						A2 A3		20030807 20031204		WO 2003-US3022							20030131			
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		7435				В2		2008												
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US 2002-434277P
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AU 2003-208931
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US 2004-858343
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US 2005-149418
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US 2006-539041
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US 2006-539049
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US 2006-539054
                  АЗ
                       20061005
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 139:164801

Title compds. I [wherein L1 and L2 = independently a bond or a linker; R2 AΒ = (un)substituted alkyl, (hetero)cycloalkyl, or (hetero)aryl; R4 = H or R2; R5 = R6 or (un)substituted alkyl, alkenyl, or alkynyl; R6 = independently H, an electroneg. group, protected alc. or thiol, haloalkyl(oxy), halo, CN, NC, OCN, SCN, NO, NO2, N3, or (un)substituted amino, sulfamoyl(oxy), acyl, carboxy, carbamoyl, (hetero)aryl(alkyl), etc.; with provisos and exclusions; and salts, hydrates, solvates, N-oxides, and prodrugs thereof] were prepared as inhibitors of the IqE and/or IgG receptor signaling cascades that lead to the release of chemical mediators. For example, coupling of 2,4-dichloropyrimidine with 4-ethoxyaniline in EtOH provided N2, N4-bis(4-ethoxyphenyl)-2,4pyrimidinediamine (II). The latter inhibited degranulation of bone marrow derived mast cells challenged with anti-IgE and ionomycin with IC50 values of 4.5  $\mu\text{M}$  and 4.4  $\mu\text{M},$  resp. Thus, I and their pharmaceutical compns. are useful in the treatment and prevention of diseases characterized by, caused by, or associated with the release of chemical mediators via degranulation of mast, basophil, neutrophil, or eosinophil cells and other processes effected by activation of the IgE and/or IgG receptor signaling cascades. The treatment and prevention of allergic diseases, low grade scarring, diseases associated with tissue destruction, diseases associated with tissue inflammation, inflammation, and scarring are targeted uses (no data).

IT 575484-59-2P 575484-65-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgE and/or IgG receptor modulator; preparation of pyrimidinediamines as IgE and/or IgG receptor modulators for treatment of allergic diseases, inflammatory conditions, and tissue destruction)

RN 575484-59-2 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-methyl- (CA INDEX NAME)

RN 575484-65-0 CAPLUS

CN Benzamide, 5-[[5-fluoro-2-[[3-[2-(methylamino)-2-oxoethoxy]phenyl]amino]-4-pyrimidinyl]amino]-2-methoxy-N-(1-methylethyl)- (CA INDEX NAME)

OSC.G 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (37 CITINGS)

- ANSWER 56 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN L9
- AN 2003:154426 CAPLUS
- DN 138:205077
- TΙ Preparation of pyrimidines as HIV inhibitors.
- Guillemont, Jerome Emile Georges; Palandjian, Patrice; De Jonge, Marc ΙN Rene; Koymans, Lucien Maria Henricus; Vinkers, Hendrik Maarten; Daeyaert, Frederik Frans Desire; Heeres, Jan; Van Aken, Koen Jeanne Alfons; Lewi, Paulus Joannes; Janssen, Paul Adriaan Jan
- PΑ Janssen Pharmaceutica N.V., Belg.
- SO PCT Int. Appl., 126 pp.
  - CODEN: PIXXD2
- DT Patent

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		EP 1419152				A1		2004	0519		ΕP	2002-	76483	39		2	0020	809	
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	IE, SI,				LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	SK			
	BR	BR 2002011909				А		2004	0824		BR	2002-	11909	9		2	0020		
	BR 2002011909 CN 1541215 CN 100509801 HU 2004001346 HU 2004001346					A				BR 2002-11909 CN 2002-815920						20020809			
	CN	CN 100509801				C		2009				0004	1016			0	0000	0.00	
	HU	2004	0013	46		A2		2004			HU	2004-	-1346			2	0020	809	
	HU	2004	5072°	46 00		A3		2009		TD	2002		20020809						
	N7	5309	5073 51	0 0		Σ Τ		2005			N7	2003- 2002- 2004-		20020809					
	ΔP	1610	<i>)</i> 1			Δ		2006			ΔP	2002		20020809					
	CN	1018	1665	8		Α		2010		CN	2009-	1014		20020009					
	EG	2468	4			A		2010		EG	2002-	892		20020810					
	TW	2729	45			В		2007	0211		ΤW	2002-	9111:	8061		2	0020	812	
	TW	2004 2005 5309 1610 1018 2468 2729 3151 8174	99			В		2009		TW	2006-	9511		20020809 20020809 20020810 20020812 20020812 20040109 20040129 20040203					
	KR	8174	53			В1		2008	0327		KR	2004-	7000	372		20040109			
	111	2004	0000.	96		A2		2004			HR	2004-	96			20040129			
	US 20040198739					A1		2004			US	2004-	4856	36		2	0040	203	
		7125				В2		2006						_					
		20041		265		Α		2005			IN	2004-	DN26.	5		2	0040	206	
	IN	2229	87			AI		2008				0004	(22			^	0040	010	
	NO	2004	UUU6.	33		A D1		2004			MO	2004-	りろろ			2	20040212		
		32763	) / 	50		⊿ RT		2009			77	2004-	1150			2	0040.	212	
		2004		ンタ ∩ 1		Δ											0040.		
		1070		ОΤ		A A1		2010	0327		HK 1.1V	2004- 2005-	1027	60		2	0050		
	111/	10,0				* 7 T		2010	0 1 0 0			2000	102/	0		4		- O T	

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US 20060111379
                         A 1
                               20060525
                                           US 2005-219163
                                                                   20050902
     US 7638522
                         В2
                               20091229
     US 20060252764
                         Α1
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     KR 969273
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                               20100820
     IN 2008DN00715
                                           IN 2008-DN715
                                                                   20080125
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                               20080711
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                         Α1
                               20090108
                                           US 2008-168540
                                                                   20080707
     NO 2008003770
                         Α
                               20040312
                                           NO 2008-3770
                                                                   20080902
     JP 2010077140
                               20100408
                                           JP 2009-259107
                                                                   20091112
                         Α
PRAI EP 2001-203090
                               20010813
                         Α
    EP 2002-77748
                         Α
                               20020610
    CN 2002-815920
                         А3
                               20020809
     JP 2003-521229
                         А3
                               20020809
    WO 2002-EP8953
                         W
                               20020809
     EP 2003-103275
                               20030903
                         Α
     US 2003-499771P
                               20030903
                         Ρ
     EP 2003-103319
                         Α
                               20030908
     EP 2003-103335
                               20030910
                         Α
     EP 2003-103668
                         Α
                               20031002
     US 2003-508486P
                         Ρ
                               20031003
     KR 2004-700372
                         ΑЗ
                               20040109
     US 2004-485636
                         A2
                               20040203
     IN 2004-DN265
                         А3
                               20040206
     MY 2004-3578
                                20040902
                         Α
     WO 2004-EP52028
                               20040903
                         Α
     EP 2005-101467
                         Α
                                20050225
     US 2005-219163
                         Α1
                               20050902
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    MARPAT 138:205077
OS
AΒ
     Title compds. [I; a1:a2a3:a4, b1:b2b3:b4 = atoms to form Ph, pyridyl,
     pyrimidinyl, pyrazinyl, pyridazinyl rings; n = 0-5; m = 1-4; R1 = H, aryl,
     CHO, alkylcarbonyl, alkyl, alkyloxycarbonyl, substituted alkyl,
     alkylcarbonyl; R2 = OH, halo, (substituted) alkyl, cycloalkyl, alkenyl,
     alkynyl, alkoxy, alkoxycarbonyl, carboxyl, cyano, NO2, amino,
     NR5, NHNH, N:N, O, CO, CH(OH), S, SOp; R3 = NHR13, NR13R14, CONHR13,
     CONR13R14, COR15, CH:NNHCOR16, substituted alkyl, (substituted)
```

polyhalomethyl, polyhalomethoxy, polyhalomethylthio, SOpR6, NHSOpR6, COR6, NHCOH, CONHNH2, NHCOR6, C(:NH)R6, 5-membered heterocycle; X1 = NR5, NHNH, N:N, O, CO, alkanediyl, CH(OH), S, SOp, X2-alkanediyl, alkanediyl-X2; X2 = alkoxyalkyl, substituted alkenyl, alkynyl, alkyl substituted with OH and a second substituent, C(:NOR8)-alkyl, R7, X3R7; R4 = halo, OH, alkyl, cycloalkyl, alkoxy, cyano, nitro, polyhaloalkyl, polyhaloalkoxy, aminocarbonyl, alkyloxycarbonyl, alkylcarbonyl, CHO, amino; R5 = H, aryl, CHO, alkylcarbonyl, alkyl, alkoxycarbonyl, etc.; R6 = alkyl, amino, polyhaloalkyl; R7 = mono-, bi-, or tricyclic (aromatic) carbocyclyl, heterocyclyl; R13, R14 = alkyl, alkenyl, alkynyl optionally substituted by cyano, aminocarbonyl; R15 = cyanoalkyl, aminocarbonylalkyl; R16 = R15, R7; p = 1, 2, were prepared Thus, 4-[(4-chloro-2pyrimidinyl)amino]benzonitrile (preparation given) and 4-(2-cyanoethenyl)-2,6-dimethylaniline were stirred together at 150° for 1 h to give 4-[[4-[[4-(2-cyanoethenyl)-2,6dimethylphenyl]amino]-2-pyrimidinyl]amino]benzonitrile. The latter inhibited HIV-induced cytopathic effect in MT-4 cells with pIC50 = 9.4. 500288-32-4P 500290-33-5P 500290-35-7P ΙT 500290-37-9P 500290-39-1P 500290-41-5P

500290-43-7P 500290-49-3P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

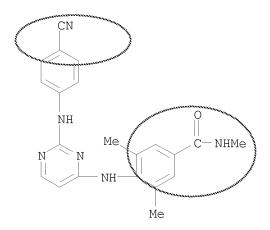
## 10/568,367 (RCE)

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrimidines as HIV inhibitors)

RN 500288-32-4 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,3,5-trimethyl- (CA INDEX NAME)



RN 500290-33-5 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,N,3,5-tetramethyl- (CA INDEX NAME)

RN 500290-35-7 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N-ethyl-N,3,5-trimethyl- (CA INDEX NAME)

RN 500290-37-9 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,N-diethyl- 3,5-dimethyl- (CA INDEX NAME)

RN 500290-39-1 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N-ethyl-3,5-dimethyl- (CA INDEX NAME)

RN 500290-41-5 CAPLUS

CN Benzamide, N-(cyanomethyl)-4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethyl- (CA INDEX NAME)

RN 500290-43-7 CAPLUS

CN Benzamide, N-(cyanomethyl)-4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-N,3,5-trimethyl- (CA INDEX NAME)

RN 500290-49-3 CAPLUS

CN Benzamide, 4-[[2-[(4-cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethyl-N-(1-methylethyl)- (CA INDEX NAME)

OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

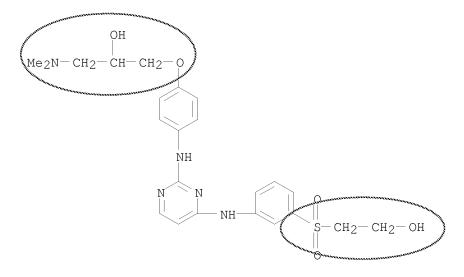
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ANSWER 57 OF 57 CAPLUS COPYRIGHT 2010 ACS on STN
L9
     2000:161263 CAPLUS
ΑN
     132:194385
DN
     Preparation of bis(arylamino)pyrimidine derivatives as anticancer agents
TI
IN
     Breault, Gloria Anne; Pease, Janet Elizabeth
PΑ
     Zeneca Limited, UK
SO
     PCT Int. Appl., 112 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     WO 2000012485 A1 20000309 WO 1000
                         KIND DATE
                         A1 20000309 WO 1999-GB2790
                                                                      19990824
PΙ
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9954382
                         A
                              20000321 AU 1999-54382
                          A1
     EP 1107957
                                  20010620
                                             EP 1999-940401
                                                                       19990824
     EP 1107957
                                 20061018
                           В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, CY
                                            JP 2000-567515
     JP 2002523497 T 20020730
                                                                       19990824
     AT 342892
                           Τ
                                20061115 AT 1999-940401
                                                                       19990824
    HK 1035531 A1 20070516 ES 1999-940401 HK 2001-106036 US 20050090493 A1 20050428 US 2004-771118 US 7176212 B2 20070213 GB 1998-18989
                                                                      19990824
                                                                      20010827
                                             US 2004-771118
                                                                       20040204
     GB 1998-18989 A 19980829
GB 1998-28433 A 19981224
WO 1999-GB2790 W 19990824
US 2001-763705 B1 20010226
PRAI GB 1998-18989
OS
     MARPAT 132:194385
AΒ
     The title compds. (I) [wherein R1 = H or (un)substituted alkyl, alkenyl or
     alkynyl; Q1 and Q2 = independently (un)substituted Ph, naphthyl, indanyl,
     or 1,2,3,4-tetrahydronaphthyl, and one or both of Q1 and Q2 is substituted
     with -X(CH2)nCHY(CH2)mZ; X = CH2, O, S, or NH; Y = H or as defined for Z;
     Z = OH, SH, NH2, alkoxy, alkylthio, (cyclo)alkylamino, or dialkylamino; n
     = 1-3; m = 1-3] were prepared as cyclin dependent kinase (CDK) and focal
     adhesion kinase (FAK) inhibitors. Examples include over 100 syntheses,
     descriptions of a number of biol. assays with some data, and 7 pharmaceutical
     formulations. For instance, 2-chloro-4-(2-bromo-4-
     methylanilino)pyrimidine (preparation given) was coupled with
     4-[3-(N,N-dimethylamino)-2-hydroxypropoxy]aniline (preparation given) in BuOH
     to give II. The latter inhibited CDK4 with IC50 = 0.6 \muM and FAK with
     IC50 = 3.3 \mu M. Typical IC50 values for compds. of the invention when
     tested in the Sulforhodamine B (SRB) cell growth inhibition assay were in
     the range of 1 mM to 1 nM. I and their pharmaceutically-acceptable salts
     and in-vivo-hydrolyzable esters are useful as anticancer agents,
     antiproliferatives, cell migration inhibitors, and apoptotic agents.
ΙT
     260045-01-0P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
```

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compound; preparation of bis(arylamino)pyrimidine derivs. as anticancer agents, antiproliferatives, cell migration inhibitors, and apoptotic agents)

RN 260045-01-0 CAPLUS

CN 2-Propanol, 1-(dimethylamino)-3-[4-[[4-[[3-[(2-hydroxyethyl)sulfonyl]phenyl]amino]-2-pyrimidinyl]amino]phenoxy]- (CA INDEX NAME)



OSC.G 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 333.67 529.84

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE

-48.45 -48.45

STN INTERNATIONAL LOGOFF AT 15:01:53 ON 20 SEP 2010

```
chain nodes :
    13 14 16 19 20 21 22 23 30 31 32
ring nodes :
    1 2 3 4 5 6 7 8
                               9 10 11
                                           12 24
                                                     25
                                                         26
chain bonds :
    2-20 \quad 3-19 \quad 4-14 \quad 6-13 \quad 9-14 \quad 13-16 \quad 21-23 \quad 22-26 \quad 30-31 \quad 30-32 \quad 32-33
ring bonds :
    1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 24-25 24-29 25-26 26-27
    27-28 28-29
exact/norm bonds :
    3-19 4-14 6-13 9-14 13-16 21-23 30-31 30-32 32-33
exact bonds :
    2-20 22-26 24-25 24-29 25-26 26-27 27-28 28-29
normalized bonds :
    1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12
isolated ring systems :
    containing 1 : 7 : 24 :
G1:H,Cl,Br,F,I
G2:[*1],[*2],[*3]
Match level :
    1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 16:Atom 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:Atom
    25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:CLASS 31:CLASS 32:CLASS 33:CLASS 40:CLASS
    41:Atom
Generic attributes :
    16:
                               : Unsaturated
```

C:\Program Files\Stnexp\Queries\10568367 (RCE b).str

Number of Carbon Atoms : less than 7 Number of Hetero Atoms : 2 or more

Type of Ring System

23:

: Monocyclic

Saturation : Saturated Number of Carbon Atoms : less than 7

Saturation : Saturated Number of Carbon Atoms : less than 7

Element Count :
Node 16: Limited
C,C3
N,N2
O,O0
S,S0

Node 23: Limited C,C2-4

Node 33: Limited C,C1-3

=>

Uploading C:\Program Files\Stnexp\Queries\10568367 (RCE b).str

chain nodes :
13 14 16 19 20 21 22 23 30 31 32 33 40
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 24 25 26 27 28 29
chain bonds :
2-20 3-19 4-14 6-13 9-14 13-16 21-23 22-26 30-31 30-32 32-33
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 24-25 24-29
25-26 26-27 27-28 28-29
exact/norm bonds :
3-19 4-14 6-13 9-14 13-16 21-23 30-31 30-32 32-33

```
exact bonds :
2-20 22-26 24-25 24-29 25-26 26-27 27-28 28-29
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12
isolated ring systems :
containing 1:7:24:
G1:H,Cl,Br,F,I
G2:[*1],[*2],[*3]
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 16:Atom 19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:CLASS
31:CLASS 32:CLASS 33:CLASS 40:CLASS 41:Atom
Generic attributes :
16:
Saturation
                       : Unsaturated
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Type of Ring System
                     : Monocyclic
                       : Saturated
Saturation
Number of Carbon Atoms : less than 7
                      : Saturated
Saturation
Number of Carbon Atoms : less than 7
Element Count :
Node 16: Limited
   С,С3
   N, N2
    0,00
    S,S0
Node 23: Limited
    C, C2-4
Node 33: Limited
   C,C1-3
       STRUCTURE UPLOADED
L1
=> d 11
L1 HAS NO ANSWERS
L1
```

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \* Structure attributes must be viewed using STN Express query preparation.

 $\Rightarrow$  s 11 sss sam

SAMPLE SEARCH INITIATED 17:01:13 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1215 TO ITERATE

100.0% PROCESSED 1215 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 22209 TO 26391 PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> => s l1 sss ful

FULL SEARCH INITIATED 17:01:39 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 24798 TO ITERATE

100.0% PROCESSED 24798 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

L3 3 SEA SSS FUL L1

=> => s 13

L4 2 L3

 $\Rightarrow$  d 14 1-2 bib,ab,hitstr

```
ANSWER 1 OF 2 CAPLUS COPYRIGHT 2010 ACS on STN
T.4
     2008:1450755 CAPLUS
ΑN
     150:20148
DN
     Preparation of substituted 2-[(3-pyridylamino)-2-
ΤI
     pyrimidinyl]anthranilamides as Aurora kinase inhibitors
IN
     Axten, Jeffrey Michael; Betancourt, Jesus R. Medina; Johnson, Neil W.;
     Semones, Marcus
     SmithKline Beecham Corporation, USA
PA
SO
     PCT Int. Appl., 55pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
                                           _____
                                                                  ______
                        ____
                                          )WO 2008-US64446
     WO 2008147831
                               20081204
                                                                 20080522
РΤ
                         A1 (
        W: AE, AG, AL, AM, AD, AT, ALL, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
            KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
        TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2007-939624P
                        Ρ
                            20070523
     CASREACT 150:20148; MARPAT 150:20148
OS
     Title compds. I (R1 = H, C1-6 alkyl, C3-6 cycloalkyl, C3-6
AΒ
     cycloalkylmethyl, C1-6 hydroxyalkyl; R2 = Me, F, C1; R3 = nitrogen-containing
     5- or 6-membered heterocycle), or pharmaceutically acceptable salts
     thereof, are prepared as Aurora kinase inhibitors. Thus, reaction of
     2,4-dibromo-5-methylpyrimidine with 2-amino-N-isopropylbenzamide, followed
     by further reaction with 6-(4-methyl-2-piperazinyl)-3-pyridinamine gave
     title compd II, isolated as the HCl salt. The prepared compds. were tested
     for Aurora A/TPX12 and Aurora B/INCENP protein kinase inhibitory
     activities in substrate phosphorylation assays (no data).
     1089653-65-5P
                      1089653-66-6P
TΤ
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of substituted 2-[(3-pyridylamino)-2-
       pyrimidinyl]anthranilamides as Aurora kinase inhibitors)
     1089653-65-5 CAPLUS
RN
     Benzamide, 2-[[5-chloro-2-[[5-[(4-methyl-1-piperazinyl)methyl]-1H-pyrazol-
CN
     3-yl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)
```

RN 1089653-66-6 CAPLUS

CN Benzamide, 2-[[5-chloro-2-[[5-[(dimethylamino)methyl]-1-methyl-1H-pyrazol-3-yl]amino]-4-pyrimidinyl]amino]-N-methyl- (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 2 CAPLUS COPYRIGHT 2010 ACS on STN
T.4
     2005:158647 CAPLUS
ΑN
     142:261547
DN
     Preparation of 2,4-pyrimidinediamines useful in the treatment of
ΤI
     neoplastic diseases, inflammatory and immune system disorders
IN
     Garcia-echeverria, Carlos; Kanazawa, Takanori; Kawahara, Eiji; Masuya,
     Keiichi; Matsuura, Naoko; Miyake, Takahiro; Ohmori, Osamu; Umemura,
     Ichiro; Steensma, Ruo; Chopiuk, Greg; Jiang, Jiqing; Wan, Yongqin; Ding,
     Qiang; Zhang, Qiong; Gray, Nathanael Schiander; Karanewsky, Donald
     Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.; IRM LLC
PA
SO
     PCT Int. Appl., 285 pp.
     CODEN: PIXXD2
DT
     Patent
                                                     Applicant's
     English
LA
FAN.CNT 2
     PATENT NO.
                            KIND
                                      DATE
                                                  APPLICATION NO.
                                                                              DATE
                            ____
                                                   _____
                                                                              _____
                             A1 20050224 WO 2004-EP9099
     WO 2005016894
                                                                              20040813
PΙ
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     CASREACT 142:261547; MARPAT 142:261547
     The title compds. I [R = aryl, heteroaryl, cycloalkyl and
AΒ
     heterocycloalkyl; R0-R3 = H, alkyl, cycloalkyl, etc.; R4 = H, alkyl; R5,
     R6 = H, alkyl, alkoxyalkyl, etc.], useful for the manufacture of a medicament
     for the treatment or prevention of a disease which responds to inhibition
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of FAK and/or ALK and/or ZAP-70 and/or IGF-IR, were prepared and formulated. E.g., a 2-step synthesis of II, starting from 2,4-dichloro-5-nitropyrimidine and 2-amino-N-methylbenzenesulfonamide, was given. The compds. I have IC50 values in the range of 10 nM to 2  $\mu\text{M}$  in cell-free ZAP-70 kinase assay.

IT 845815-23-8P

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,4-pyrimidinediamines useful in the treatment of neoplastic diseases, inflammatory and immune system disorders)

RN 845815-23-8 CAPLUS

2,4-Pyrimidinediamine, 5-chloro-N2-(1,3-dimethyl-1H-pyrazol-5-yl)-N4-[2-[(1-methylethyl)sulfonyl]phenyl]- (CA INDEX NAME)

OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 12.12 204.37

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE

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